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Guide for Preparing the Environmental Report for Water and Waste Projects in Vermont

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WASHINGTON, D. C.
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U.S. DEPARTMENT OF AGRICULTURE

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INTRODUCTION

In applying for financial assistance from the Rural Development, Rural Utilities Service's (RD/RUS) loan and grant programs, the applicant will, in conjunction with preparing a Preliminary Engineering Report (see 7 CFR 1780.33 (c)), submit an Environmental Report to support the RD/RUS's environmental review process as required by the National Environmental Policy Act. This Bulletin provides guidance on preparing the Environmental Report, specifically:

- The format for the Environmental Report.
- The environmental issues that need to be considered during a proposed project's planning and design.
- The sources for locating the required information.
- Methods and information regarding public notices and involvement.

The Vermont State Office of Rural Development has tailored this Rural Utilities Service Bulletin 1794A-602 for use on projects located within Vermont. The supplemental information provided by Vermont is noted by the margin bars to the left and right of each portion so altered. This state supplement thus combines the relevant information from the nationwide bulletin and expands it for the state-specific items for projects in Vermont. This State Supplement focuses on the contents of sections 3.0 Affected Environment / Environmental Consequences and 6.0 Exhibits.

For many purposes, use of maps and other documents can take the place of correspondence to document that there will not be an effect.

This state supplement is prepared in accordance with the requirements of the Rural Utilities Service Staff Instruction 1794-1. "As a minimum the supplement shall contain the names and addresses of Federal and State environmental regulatory agency officials who have jurisdiction over the environmental resources in each State, a listing of any unique State environmental or land use requirements, and any Intergovernmental Review Process requirements."

The Director, Engineering and Environmental Staff has approved this state supplement in accordance with the requirements of the Rural Utilities Service regulation "Environmental Policies and Procedures" (7 CFR 1794.7(b)).

This State Supplement focuses on sources needed to document the affected environment and where to obtain those exhibits. It does not cover steps that need to be taken to avoid, minimize, or mitigate effects that the proposed project will have.

Internet sites are provided where they have information useful to identifying locations of resources.

This Supplement provides addresses for federal and State agencies involved with the various environmental resources that need to be evaluated for any project.

The basic content, purposes, and uses of this State Supplement are summarized as follows:

- 1. This State Supplement covers those environmental resources that occur in Vermont.
- 2. It provides information on who to contact for further information about the resources.
- 3. It provides information on the exhibits needed to support environmental findings for each resource. It does not provide information on any correspondence that might be needed to resolve potential effects.
- 4. Applicants and potential applicants will use this State supplement when preparing the environmental report to be submitted as part of the Preliminary Engineering Report.
- 5. Rural Development management will review individual projects for consistency with this State Supplement.

An explanation of the procedure that is normally followed by the applicant and RD/RUS for a proposed project is shown in Figure 1 below.

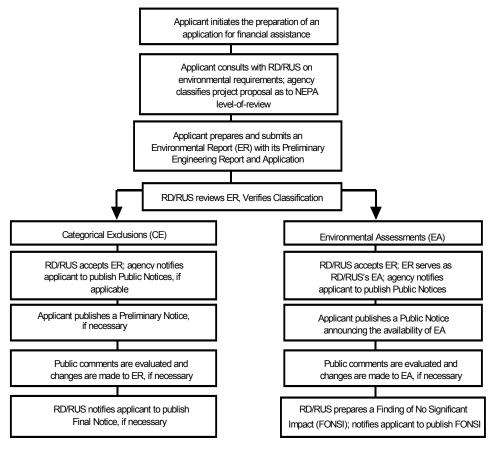


Figure 1

1.0 National Environmental Policy Act

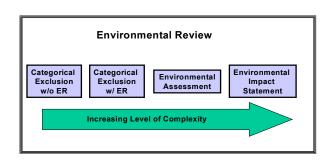
As its name implies, the National Environmental Policy Act establishes the Federal government's environmental policy. Its primary goal is to help public officials make decisions that are based on an understanding of the environmental consequences of their actions, and to take actions that protect, restore, and enhance the environment. To accomplish this, the National Environmental Policy Act requires Federal agencies to either prepare or have prepared written assessments or statements that describe the:

- Affected environment and environmental consequences of a proposed project;
- Reasonable or practicable alternatives to the proposed project; and
- Any mitigation measures necessary to avoid or minimize adverse environmental effects.

In accordance with the National Environmental Policy Act, the Council on Environmental Quality has issued regulations (40 Code of Federal Regulations (CFR) 1500 – 1508) establishing a standard Federal environmental review process. Three levels of environmental reviews were established:

- Categorical Exclusions,
- Environmental Assessments, and
- Environmental Impact Statements.

In accordance with the Council on Environmental Quality regulations, RD/RUS's Water and Environmental Program has classified its actions, that is to provide financial assistance, within these levels of review with one modification. Certain RD/RUS actions categorized as Categorical Exclusions are split into those that do not require an



Environmental Report and those that do require an Environmental Report.

1.1 Environmental Report

The Environmental Report prepared by applicants will enable RD/RUS to evaluate the environmental effects of those proposed projects that are classified as either Categorical Exclusions or Environmental Assessments. It will also enable RD/RUS to fulfill its requirements under the National Environmental Policy Act and other environmental mandates.

An Environmental Report must be sufficiently detailed to enable RD/RUS to:

- Establish the purpose and assess the need for the proposed project;
- Determine if all reasonable alternatives to the proposed project have been appropriately considered;
- Evaluate the environmental effects of the proposed project and the alternatives considered;
- Assess the significance of those effects;

Specify mitigation measures where necessary.

As per the Council on Environmental Quality regulations, all planning and other environmental review procedures shall be integrated so that they run concurrently rather than consecutively. Therefore, the Environmental Report will normally be prepared with and included as part of the Preliminary Engineering Report. However, because the Environmental Report may become a public document it needs to be a stand-alone document. The Environmental Report and Preliminary Engineering Report will be reviewed and approved concurrently by the Rural Development State Environmental Coordinator and State Engineer. Environmental Reports not found acceptable will be returned to applicants for the resolution of outstanding concerns.

Even though applicants are required to integrate and consider environmental values during a proposed project's planning and design, it is RD/RUS's ultimate responsibility to independently evaluate and verify the accuracy of the information supplied in the Environmental Report. RD/RUS takes final responsibility for the scope and content of the resulting environmental document.

In order to expedite the application process and RD/RUS's review and approval of a proposed project, applicants are strongly encouraged to consult early and frequently with Rural Development staff to ensure that all environmental issues are described, evaluated, and impacts appropriately considered.

The information presented and the analyses performed relative to environmental issues in the Environmental Report will allow RD/RUS to determine the level of significance of the environmental effects of the proposed project. The significance of the impacts identified will enable RD/RUS to determine whether the impacts can be mitigated or if a higher level of environmental review is required for a proposed project (i.e. from a categorical exclusion to an environmental assessment or from an environmental assessment to an Environmental Impact Statement. The information provided must be sufficient for RD/RUS to determine that its Federal action (providing financial assistance) will not conflict with other environmental statutes, implementing regulations, policies, procedures, and Executive Orders that are applicable to the proposed project.

Key features of an Environmental Report:

- Descriptions and discussions should be clear and complete enough so that a
 person with little previous knowledge of the proposed project can make an
 independent environmental review and easily verify the accuracy of the
 information and conclusions drawn from such information. Maximum use of
 maps depicting location of project components and environmental resources is
 crucial to expediting this review.
- Where conclusions are made, sufficient documentation must be presented to substantiate them.
- Any environmental concerns that are raised by Federal, State, or local agencies
 or the public must be addressed as completely as possible and resolved before
 the Environmental Report will be considered complete.

- All environmental documentation submitted to or received from Federal, State, or local agencies shall be referenced, as appropriate, and included in the Environmental Report.
- RD/RUS, can not substitute another Federal, State, or local agency's decision for its environmental decision. RD/RUS must still make its own independent decision and when applicable so inform the public. RD/RUS will inform the applicant when public notices are required; applicants will be expected to publish the public notices in newspapers of local circulation.

1.2 Relationship of Environmental Report to the Preliminary Engineering Report

RD/RUS requires that applicants to the Agency's loan and grant program submit with its application a Preliminary Engineering Report and an Environmental Report. The environmental review process is to be performed concurrently with an applicant's engineering planning and design activities. It is also RD/RUS's policy to minimize duplication of effort and paperwork. Since engineering planning and design activities and the environmental review process are so intricately linked, this Bulletin and the guides for preparing Preliminary Engineering Report in 7 CFR 1780 (Bulletins 1780-2 through 1780-5) request similar types of information. To minimize duplication of effort, it is sufficient to provide reference to environmental information from the Environmental Report in the Preliminary Engineering Report. This is necessary because the environmental documentation must be a stand-alone document for public involvement requirements.

1.3 Public Involvement

A key element of the National Environmental Policy Act environmental review process is public involvement. Public involvement activities for categorical exclusions and environmental assessments normally include publishing notices for a prescribed length of time. Several of the environmental statutes and Executive Orders considered under RD/RUS's environmental review process also requires public notices. See Section 5.0 for specific public notice requirements and sample public notices. In most cases applicants will be informed by the Rural Development Processing Office what and when to publish public notices.

1.4 RD/Rural Utilities Service's Decision

RD/RUS's environmental review process must be completed before RD/RUS can make a decision regarding the approval of a proposed project. RD/RUS's decision to provide financial assistance will culminate by the obligation of loan and grant funds. RD/RUS's environmental decision will be one of the following:

 The proposed project meets the classification of a categorical exclusion and RD/RUS will complete a categorical exclusion form to document that the proposal does not individually or cumulatively have a significant effect on the human environment and, for which, neither an environmental assessment nor an Environmental Impact Statement is required.

- 2. The proposed project meets the classification of an environmental assessment and RD/RUS, after appropriate public review, will prepare a Finding of No Significant Impact to document that the proposal does not individually or cumulatively have a significant effect on the human environment and that an Environmental Impact Statement is not required. The Finding of No Significant Impact will be published to notify the public of RD/RUS's decision.
- 3. The project will require an Environmental Impact Statement to fully evaluate the potential for significant environmental effects to the human environment or to address substantive public concerns. In accordance with 40 CFR 1506.5, "Agency Responsibility" and to avoid potential conflicts of interest, applicants will not be allowed to prepare environmental documentation for an Environmental Impact Statement. If a determination is made that an Environmental Impact Statement is required, RD/RUS will be responsible for initiating the document.

1.5 Project Changes Subsequent to Approval

In some cases during the bidding and contracting of RD/RUS approved projects, facility design and proposed construction activities change from the approved Preliminary Engineering Report and environmental review documentation. If any facility design or proposed construction activities deviate from those contained in the approved documents applicants may be required to undertake additional environmental review activities which may include subsequent environmental regulatory agency review and concurrence, and potentially even follow-on public notices. If this is the case, applicants shall contact the Rural Development State Environmental Coordinator or Processing Office to determine what additional environmental review requirements would be applicable.

1.6 Sources of Information

Throughout this Bulletin various World Wide Web (WWW) addresses, or websites, are given for sources of information. These websites often provide some very useful and

current information such as regulatory requirements, guidance suggestions, resource listings, and contact addresses and telephone

CHECK THE RUS WEBSITE FOR THE MOST CURRENT VERSION OF THE BULLETIN - http://www.usda.gov/rus/water/ees/index.htm

numbers for information and assistance. Often these websites will provide links to other websites that can also be helpful in preparing an Environmental Report. You are encouraged to take advantage of these resources. RD/RUS maintains a list of useful web sites on its website.

If, during the preparation of an Environmental Report, a question arises concerning what is needed, the Rural Development staff should be contacted for advice. Similarly, the applicant should consult with RD/RUS immediately when it appears that a proposed project may have significant environmental effects, is controversial for environmental reasons, or if any regulatory agency raises a significant concern or does not concur with any conclusions drawn during the environmental review process.

Environmental compliance issues can be complex and varied, particularly as they relate to National Environmental Policy Act compliance. In addition to this Bulletin and the guidance it contains, Rural Development has developed a series of interactive multimedia instruction on Compact Disks that cover most of the environmental statutes, regulations, and Executive Orders considered in its National Environmental Policy Act compliance process. These Compact Disks are available to applicants and their engineering consultants; for copies contact the Rural Development State Environmental Coordinator or the Director, Engineering and Environmental Staff (for address and telephone numbers see http://www.usda.gov/rus/water/ees/index.htm). In addition RD/RUS maintains an Environmental Compliance Library at its web site (http://www.usda.gov/rus/water/ees/environ.htm) that contains either text copies of or information to links for most of the environmental statutes, regulations, and Executive Orders pertinent to RD/RUS's National Environmental Policy Act compliance process.

2.0 FORMAT OF THE ENVIRONMENT REPORT

The general format of an Environmental Report is as follows:

- 1.0 Purpose and Need of Project
- 2.0 Alternatives to the Project Action
- 3.0 Affected Environment/Environmental Consequences
- 4.0 Summary of Mitigation
- 5.0 Correspondence
- 6.0 Exhibits

Characteristics of the Environmental Report are to:

- Minimize repetition and the inclusion of extraneous background information.
 Reference supporting material, where appropriate.
- Emphasize real environmental issues. Only include information relevant to the proposed project and which is useful to RD/RUS decisionmakers and the public in understanding the environmental consequences of the proposed project.
- Present the information in a clear, concise manner, minimizing the use of long narratives. Bulleted lists, summary or comparative tables, maps and diagrams are preferable and will expedite RD/RUS's review.

2.1 Level of Detail

The amount of information and level of analysis provided in the Environmental Report should be commensurate with the magnitude of construction activities and their potential level of impact. For example, simple statements regarding a particular issue can be made for proposed projects classified as categorical exclusions where minimal environment effects are expected. The statement should assert the conclusion drawn from the analysis referencing the information used to support the conclusion. If a proposed project will not convert a floodplain, simply state so and provide the number designation and a copy of the Federal Emergency Management Agency, Flood Insurance Rate Map(s) (FIRM) or Flood Boundary and Floodway Map(s) (FBFM) (with

the facility depicted on the map) that was reviewed or, if a Federal Emergency Management Agency map is unavailable, list the soil units mapped on the USDA, Natural Resources Conservation Service's soil survey map and provide a copy of the appropriate soil survey sheet. Likewise, a more detailed level of information and analysis will be necessary to support any conclusions reached for proposed project classified as an environmental assessment and where proposed construction activities are more involved and complex.

2.2 Maps

The use of maps, photographs and diagrams will improve the Environmental Report's clarity and greatly expedite RD/RUS's review process. For large projects and reference purposes, United States Geological Survey topographic maps (1:24,000) should be used to show the location of lines and appurtenances. For all proposed projects, the Natural Resources Conservation Service's Soil Survey maps (1:15,840 or 1:20,000) should be used to depict all site-specific construction activities, such as facilities or utility lines. The environmental resources that are readily apparent on soil survey maps include: wetlands (hydric soils), floodplains, stream crossings, important farmland, land use trends, geodetic information (Range, Township, section numbers), and vegetative cover. Vegetative cover is potentially useful in critical habitat determinations for threatened and endangered species. Where proposed projects include construction in or close to floodplains, facility locations should be drawn on the Federal Emergency Management Agency's Flood Insurance Rate Maps; if Federal Emergency Management Agency maps are unavailable facility locations should be drawn on soil survey maps. All of the above activities can be drawn by hand on the described maps.

2.3 Format of Environmental Report

For a more detailed description of the Table of Contents of an Environmental Report see Exhibit E. The following section numbers correspond to the appropriate numbers in the Environmental Report.

1.0 Purpose and Need for Project

This section will succinctly describe the proposed project and establish the underlying purpose and need to which RD/RUS is responding. This section has two subsections.

1.1 Project Description (Proposed Action or Proposed Project)

Provide a description of the proposed project summarizing all proposed facility improvements and construction activities. Commonly referred to in the National Environmental Policy Act and the Council on Environmental Quality regulations as the proposed action.

1.2 Purpose and Need of Project

This subsection shall establish the underlying purpose of the proposed project and the need to which RD/RUS is responding. Therefore it is necessary to clearly and definitively demonstrate the purpose and establish a need for the project. The information will also be used to determine what reasonable or practicable alternatives need to be evaluated in the Environmental Report. In addition this section should state what would be the consequences of not implementing the proposed project, which is referred to in the National Environmental Policy Act as the No Action alternative.

2.0 Alternatives to the Proposed Action

In planning and developing a proposed project, applicants shall explore all reasonable alternatives that could satisfy and are consistent with the purpose and need of the project. Alternatives may include:

- Engineering design alternatives,
- Siting locations of facilities,
- System capacities, etc.

As the engineering planning and design and environmental review is developed, various alternatives may be evaluated and ultimately determined to be unreasonable for various technical or financial reasons. In this section of the Environmental Report, outline the reasonable alternatives considered and present the evaluation factors considered in judging each alternative's ability to met the described purpose and need of the proposed project.

All relevant factors that contribute to the decisionmaking process shall be included, for example, technical and economic feasibility issues, environmental considerations, or mitigation measures. The evaluation and weighting criteria assigned in analyzing the proposed project and the alternatives considered should be summarized and presented in a comparative table.

3.0 Affected Environment/Environmental Consequences

This section of the Environmental Report will:

- Describe and document the environmental resources of the area to be affected by the proposed project and each alternative considered.
- Discuss the environmental consequences of each affected resource.
- Establish and discuss any mitigation measure(s) necessary to avoid or minimize any adverse impacts to a specific environmental resource.

Only alternatives determined to be reasonable need to be analyzed in this section.

The typical process to document and consider effects to environmental resources is:

- 1. Describe the area(s) to be affected by the proposed project and each alternative considered. Affected areas may correspond to the service area of the proposed project. Alternatives may have different affected areas. Include maps outlining the affected area(s) showing the location of all proposed construction.
- 2. Identify the environmental resources in the described affected area(s). Applicants, as necessary, will be required to consult with appropriate environmental regulatory agencies to identify the environmental resources in the affected areas and, in addition, to review any conclusions drawn from an analysis of the proposed project's potential effect to these resources. Agency contacts or websites where preliminary information can be found is discussed in Section 4.0.
- 3. Discuss the environmental effects or consequences of the proposed project and each alternative considered. All direct, indirect and, if applicable, cumulative effects need to be identified and discussed. Some of the impacts may be viewed as adverse, while others may be viewed as beneficial. For some actions, data may be unavailable or insufficient to make a determination of an effect to an environmental resource, if so, clearly state the situation. Otherwise clearly describe all effects or consequences to all environmental resources whatever they may be. For specific guidance of the extent to which effects (direct, indirect and cumulative) need to be discussed, applicants should contact the Rural Development State Environmental Coordinator or Processing Office.
- 4. Identify potential mitigation measures that may be necessary to avoid or minimize any adverse effects caused by the proposed project and each alternative considered. Any and all mitigation measures need to be developed with an applicable environmental regulatory agency and be developed so as to be enforceable.

Section 3.0 in this Bulletin provides more detail on the following environmental resources to be evaluated.

- Land Use/ Important Farmland/ Formally Classified Land
- Floodplains
- Wetlands
 Cultural Resources

- Biological Resources
- Water Quality Issues
- Coastal Resources
- Socio-Economic/ Environmental Justice Issues
- Miscellaneous Issues

Each of the above environmental resources shall have its own subchapter in the Environmental Report listing the affected environment, environmental consequences and mitigation measures for each resource. For example:

- 3.1 Land Use/Important Farmland/Formally Classified Lands
- 3.1.1 Affected Environment
- 3.1.2 Environmental Consequences
- 3.1.3 Mitigation

See Exhibit E for a more detailed description of the Table of Contents for the Environmental Report.

4.0 Summary of Mitigation

This section of the Environmental Report shall summarize proposed mitigation measures described in Section 3.0 of this Bulletin. Describe implementing criteria of mitigation measures and how each measure will be enforced. A table format is useful in presenting the evaluation.

5.0 Correspondence and Coordination

As specified in Section 3.0 of this Bulletin, many of the environmental issues evaluated require coordination with State or Federal environmental regulatory agencies. All correspondence that is related to this coordination should be included in this section of the Environmental Report.

6.0 Exhibits

Attach supporting documents, maps, photographs, etc.

3.0 ENVIRONMENTAL INFORMATION AND REQUIREMENTS

This section provides the following information:

- The environmental resources that must be considered and the basis for the consideration:
- The type of information that must be provided in the Environmental Report;
- Potential information sources for each environmental resource.

This information and analysis must be documented in the Environmental Report:

The provisions of specific Federal environmental statutes, regulations, and Executive Orders may be applicable to proposed projects for which the Environmental Report is being prepared. A list of such statutes, regulations, and Executive Orders has been included in Exhibit D. This listing includes the title and citation for each item. These documents are available or links to websites where these documents can be found are

located on the environmental section of the RD/RUS, Engineering and Environmental Staff (EES) website (http://www.usda.gov/rus/water/ees/environ.htm).

In preparing an Environmental Report, there are two distinct actions that are normally necessary. The first action is to collect information to determine if any environmental resources occur in the area to be affected by the proposed project and any of the alternatives considered. If these resources are present, applicants must evaluate whether or not the proposed project has the potential to affect these resources. If it is determined that the proposed project will directly or indirectly affect any environmental resource, the applicant's second action is to submit a summary of the analyses and conclusions regarding these potential effects to the agencies that have regulatory jurisdiction over these resources. If adverse impacts are expected, applicants may need to negotiate and coordinate potential mitigation measures that will avoid or minimize these impacts with these agencies. If at any time the impacts are determined to be significant an Environmental Impact Statement may be necessary. Consult with the Rural Development State Environmental Coordinator for a determination of what constitutes "significant".

In order to accomplish the two actions described above, the applicant may need to consult directly with agencies on two different occasions. Depending on the resource in question, the first consultation will be the collection of basic information on the presence of environmental resources in the affected areas of proposed projects. This effort may be completed directly with agencies or by using information obtained from Internet resources. Then, and again depending on the environmental resource, certain agencies must be consulted to concur with any conclusions drawn on whether environmental resources will be directly or indirectly affected by the proposed project. If there is no practicable alternative to a conversion or if there is a potential for an adverse effect to a resource, appropriate mitigation measures must be evaluated and included as part of the project design and in the Environmental Report.

If during the planning and design of the proposed project it is concluded that there is no other practicable alternative than to convert or adversely impact an environmental resource, the applicant must demonstrate and justify this assertion to RD/RUS's satisfaction. In some cases even RD/RUS's concurrence with a proposed project's adverse impact may not be sufficient for project approval; agencies with jurisdiction over the resource must in some cases concur with the proposed impact. For example, RD/RUS's policy is to not directly or indirectly support development in floodplains. Therefore, RD/RUS will not finance projects that propose to construct facilities in a floodplain unless it can be determined that there is no other practicable alternative. Applicants asserting the claim of no practicable alternative have the burden of demonstrating and justifying the validity of their claim to RD/RUS's satisfaction.

The Environmental Report will not be considered complete until all proper coordination has been completed with appropriate Federal and State environmental regulatory agencies. To facilitate the Environmental Report, applicants should contact agencies early and follow-up regularly. Failure to contact applicable agencies will result in the return of the Environmental Report for revisions and delay RD/RUS's overall processing of the applicant's application for financial assistance.

Normally, the best sources for data collection and information are Federal, State, and local agencies that have jurisdiction over a particular environmental resource. Documents transmitting or receiving information from these agencies or a record of conversations or meetings with agencies should be included in the Environmental Report. More detailed information on agency contacts is presented in Section 4.0.

The above discussion is not meant to imply that the applicant must always contact all listed agencies before RD/RUS will consider the acceptability of an Environmental Report. In certain instances, a specific environmental law clearly does not apply because of the project's geographic location (e.g., the Coastal Zone Management Act (CZMA) does not apply in Idaho). If previous environmental contacts with an agency established that the type of construction in question has no environmental effect, a specific review may not be necessary, however a statement regarding this fact needs to documented in the Environmental Report. Thus, an applicant need not request comment and input from all of the agencies listed under each issue for every project. The Rural Development State Environmental Coordinator or Processing Office can provide detailed guidance on specific proposed projects.

The Environmental Report should indicate the source for data presented, analyses performed using such data, conclusions reached, and evidence of proper coordination for each environmental resource identified and evaluated. In performing the analysis, three types of environmental effects or impacts should be evaluated:

- Direct effects;
- Indirect effects; and
- Cumulative effects.

Applicants need to be aware of these three types of impacts when discussing the effects or impacts their proposed project has on the environmental issues listed below.

Direct effects are caused by the action and occur at the same time and place (e.g. construction activities). Indirect effects are those caused by the action and are later in time or further removed in distance, but are still reasonably foreseeable (e.g. impacts caused by growth induced by the project). Cumulative effects result from the incremental impact of the proposed project when added to other past, present, and future actions regardless of who undertakes such other actions (e.g. effects of the interaction of this project with other past, present, and future activities in the area. (A good example would be the effect of a proposed project's well field for ground water appropriations where it is only one of many well fields that utilize an aquifer of limited size or recharge.)

3.1 Land Use

Decisions concerning land use arise from needs to accommodate needed growth and development; prevent unwarranted and costly sprawl; avoid unwarranted conversion of farm, range, and forest lands and wetlands from existing uses and encroachment on floodplains; provide or improve community services and facilities; assure appropriate environmental quality; assure adequate supplies of suitable-quality water; and provide

for proper waste disposal in rural areas. It is USDA's policy to promote land use objectives responsive to current and long-term economic, social, and environmental needs and discourage the unwarranted conversion of important land resources to other uses. In general, USDA supports and promotes compact community development by discouraging the unwarranted expansion of the peripheral boundaries of existing settlements.

As part of the Environmental Report, the compatibility of the proposed project and the alternatives considered with existing land use and land use plans should be discussed, as well as, possible land use changes that may result from implementing the proposed project. Land use issues are divided into three categories:

- General land use;
- Important farmland, and prime rangeland and forest land; and,
- Formally classified lands.

3.1.1 General Land Use

3.1.1.1 Land Use Information

The types of information that should be provided include (by narrative description and maps):

- 1. Any existing zoning ordinances and land use plans;
- 2. Total land area required or proposed for purchase and the amount of land that will be disturbed by construction and operation;
- 3. Affected land areas classified by type of current land use such as residential, commercial, agricultural, rangeland, forest land, etc;
- 4. An estimate of the number of homes and population and businesses that are in close proximity to and likely to be directly affected by any proposed wastewater, water treatment, or solid waste facilities. Similar information for the alternatives considered should be provided.
- 5. Information on whether the governing body of the project is also responsible for land use within the town. If not, provide information on the co-ordination between the project's governing body and those responsible for land use.
- 6. A recent aerial photograph showing the project plus the surrounding area.
- A U. S. G. S. topographic map showing the project area. A black-and-white photocopy is not acceptable, because much of the information from the six-color original is lost.

3.1.1.2 Potential Information Source

Municipalities

Municipalities are responsible for developing Town Plans and ordinances relating to zoning and subdivision. The best source for an address and contact for the Town is from the client.

Addresses for municipalities can be obtained from a number of sources.

One of the sources is the Vermont Yearbook published by the National Survey in Chester, Vermont. This is available at many bookstores.

Another source is the Secretary of State's website: http://vermont-elections.org/el_pubs/Clerks.html

- Map from the Town Plan showing current land use in the area affected by the proposed project. (Use the map from the regional plan if there is no town plan).
- Map from the Town Plan showing the proposed land use in the area affected by the proposed project. (Use the map from the regional plan if there is no town plan).
- Zoning map showing the area affected by the project.
- The three types of maps above may need to be supplemented by text from the zoning ordinance or the Plan to clarify the land use.

Regional Planning Commission.

Regional planning commissions are responsible for developing regional plans. The applicant can normally provide the name of a person to contact at the regional planning commission for the project's location. A list of the commissions is available on the department of development and community affairs' website, www.state.vt.us/dca/housing/rpc.htm.

Vermont Mapping Program

The Vermont Mapping Program is one source for aerial photographs. Other sources of recent photographs are acceptable.

Vermont Mapping Program 43½ Randall Street Waterbury, Vermont 05676-1512 Telephone 802-241-3507 www.state.vt.us/tax/map2.htm

Aerial photograph showing the area affected by the proposed project.

Vermont Environmental Board

The District Environmental Coordinators who receive and consider applications for development and subdivision permits are the primary contact people for Act 250. The District Environmental Coordinators and their regional office locations are listed in the Field Guide to the Vermont Agency of Natural Resources.

- Permit under the Vermont Land Use and Development Act
- Exhibits developed for the Act 250 application that document any of the resources to be evaluated in the Environmental Report.

U. S. Geological Survey

The Geological Survey makes topographic maps that show a wide range of natural and manmade features. Maps are available from many sources. The U. S. Geological Survey provides a list of map dealers in Vermont at

mapping.usgs.gov/esic/map_dealers/vt.html. Maps can also be ordered from the National Map Distribution Center at 888-275-8747.

 Original U. S. G. S. topographic map showing the area affected by the proposed project.

3.1.2 Important Farmland, Prime Forest Land, and Prime Rangeland

The Farmland Protection Policy Act, the USDA regulation implementing it (7 CFR Part 658), and USDA Departmental Regulation No. 9500-3, "Land Use Policy", provide protection for important farmland and prime rangeland and forest land.

There are neither prime forest lands nor prime rangelands in Vermont.

3.1.2.1 Important Farmland Information

The types of information that should be provided include:

- 1. Areas of important farmland affected by the project and the amount of area to be disturbed:
 - Soil survey map showing the area affected by the proposed project with important farmland soils highlighted.
 - Important Farmland Map if in Addison or Grand Isle county showing the area affected by the proposed project.
- Where conversion or adverse effects of such lands will occur as a result of the proposed project, include a discussion concerning these effects and whether alternatives are available that will avoid the conversion or adverse effect;
- 3. For facility and transmission line locations (where line placement can be flexible) in important farmland areas, Form AD-1006 or NRCS-CPA-106, respectively, containing the required input from the Natural Resources Conservation Service. This requirement is not applicable for distribution or collection networks where the purpose is to hook up existing users.
 - Farmland Conversion Impact Rating (Form AD-1006). The AD-1006 need not be completed if the site is:
 - already in urban development (more than 30 structures/40 acres) already in water storage
 - an urbanized area on the Census Bureau Map
 - an urban area with tint overprint on U. S. G. S. topographic maps "urban built-up" on USDA Important Farmland Maps
 - a white area on USDA Important Farmland Maps
 - Farmland Conversion Impact Rating for Corridor Type Projects (NRCS-CPA-106)

Forms are available from Rural Development, from the Natural Resources Conservation Service, or from the Internet (www.ftw.nrcs.usda.gov/npss/ad.htm and .../cpa.htm). The forms from the Internet sites are electronic versions that can be filled in using Adobe Acrobat Reader.

3.1.2.2 Potential Information Sources

Natural Resources Conservation Service

Addresses for offices of the Natural Resources Conservation Service are available on the web at www.vt.nrcs.usda.gov/vtloca.htm or through their state office.

Natural Resources Conservation Service 69 Union Street Winooski, Vermont 05404 802-951-6796

soil survey maps (http://www.statlab.iastate.edu/soils/nsdaf/), NRCS State and local offices will provide consultation for Important Farmland determinations.

American Farmland Trust (http://www.farmland.org)

<u>Farmland Information Center</u> (http://farm.fic.niu.edu/fic/home.html).

For more information see Exhibit F-1.

3.1.3 Formally Classified Lands

There are certain properties that are either administered by Federal, State, or local agencies or have been accorded special protection through formal legislative designations. For the purpose of this Bulletin, these properties have been designated as "formally classified lands". Such formally classified lands that may be encountered include, but are not necessarily limited to:

- National natural landmarks;
- National historic parks;
- Wilderness areas;
- Wild and scenic and recreational rivers;
- Wildlife refuges:
- National trail;
- State parks;
- National forests:

The list above contains those formally classified lands that occur in Vermont.

Visual impacts to formally classified land from proposed projects need to be considered as appropriate, see Section 3.4.3.

3.1.3.1 Formally Classified Land Information

The types of information that should be provided include:

- 1. The amount of each type of such lands that will affected by the proposed project and the alternatives considered:
- 2. The effects (direct, indirect, and cumulative) to any formally classified land;

- 3. The views of the agencies and/or Indian tribes administering the potentially affected properties identified in (a) and (b) above; and
- 4. Correspondence received from all agencies contacted.
- 5. Information noted under potential information sources for each formally classified land that is located near a project.

3.1.3.2 Potential Information Sources

National Natural Landmarks

National Park Service

The National Park Service is responsible for identifying and designating National Natural Landmarks. They can provide assistance in assessing potential impacts to a landmark. The address is:

Mary Foley
Natural Resources
National Park Service
15 State Street
Boston, Massachusetts 02109
Telephone 617-223-5024

 Provide a map of the area of the National Natural Landmark from the National Park Service showing the area affected by the proposed project, if the project is near a National Natural Landmark.

The eleven National Natural Landmarks in Vermont are:

Battell Biological Preserve, Middlebury Cornwall Swamp, Cornwall, Middlebury, and Whiting Little Otter Creek Marsh, Ferrisburg Fisher-Scott Memorial Pines, Arlington Camel's Hump

Mount Mansfield Natural Area Franklin Bog, Franklin Molly Bog, Morristown Barton River Marsh, Coventry Lake Willoughby Natural Area Gifford Woods, Killington

National Historical Park

National Park Service

The Marsh-Billings-Rockefeller National Historical Park in Woodstock is part of the National Park System. The National Park Service has jurisdiction over the three zones (historic, protection, and scenic). The address is:

National Park Service
Rolf Diamant, Superintendent
Marsh-Billings-Rockefeller National Historical Park
P. O. Box 178
Woodstock, Vermont 05091
Telephone 802-457-3368

• Provide a map of the area of the Park from the National Park Service showing the area affected by the proposed project, if the project is near the Park.

Wilderness Areas

U. S. Forest Service

The U. S. Forest Service administers all six of the designated wilderness areas in Vermont. For information and consultation, contact:

Supervisor, Green Mountain and Finger Lakes National

Forests

231 North Main Street Rutland, Vermont 05701 Telephone 802-747-6700

 Provide a map of the area of the wilderness from the U. S. Forest Service showing the area affected by the proposed project, if the project is near a wilderness area.

The six wilderness areas in Vermont are:

Big Branch Dorset, Mount Tabor, Peru

Breadloaf Granville, Hancock, Lincoln, Ripton, Warren

Bristol Cliffs Bristol, Lincoln

George D. Aiken Readsboro, Woodford

Lye Brook Manchester, Stratton, Sunderland, Winhall

Peru Peak Mount Tabor, Peru

Wild, Scenic, and Recreational Rivers

This land use includes rivers on the Nationwide Rivers Inventory.

National Park Service

The National Park Service provides co-ordination services for all rivers in the Nationwide River Inventory, except those located within the Green Mountain National Forest. The address is:

Jamie Fosburgh

National Park Service, Boston Support Office

Rivers Program 15 State Street

Boston, Massachusetts 02109 Telephone 617-223-519

Provide the outstanding values for a river segment listed on the inventory, if the
project is within ¼ mile of a listed segment, is visible from a listed segment, or
will have a discharge to or a withdrawal from a listed segment.

There are 66 river segments in Vermont listed on the nationwide rivers inventory. A list of the segments and their outstanding values can be found at this website: (www.ncrc.nps.gov/rtca/nri/vt.htm)

United States Forest Service

The Green Mountain National Forest administers those river segments on the Nationwide River Inventory located within the Green Mountain National Forest. The address is:

Supervisor, Green Mountain and Finger Lakes National Forests 231 North Main Street Rutland, Vermont 05701 Telephone 802-747-6700

Wildlife Refuges

U. S. Fish and Wildlife Service

The Fish and Wildlife Service is responsible for the two National Wildlife Refuges in Vermont.

The address for the Missisquoi Refuge is:

Refuge Manager Missisquoi National Wildlife Refuge P. O. Box 163 Swanton, Vermont 05488-0163 Telephone 802-868-4781

 Provide a map of the Wildlife Refuge showing the area affected by the proposed project, if the project is near the refuge.

The address for the Silvio O. Conte Refuge is:

Silvio O. Conte National Fish and Wildlife Refuge 38 Avenue A Turners Falls, Massachusetts 01376 413-863-0209

 Provide a map of the Special Focus Areas or of the Scattered Site in Putney (or any additional scattered sites), if the proposed project is near either a special focus area or a scattered site. This information is also available at www.fws.gov/r5soc, under Where We Are, Conte Refuge Boundaries (Land Protection Plan) and Where We Are, Connecticut River Watershed Special Focus Areas Map.

Vermont Department of Fish and Wildlife

The Department manages the wildlife management areas. The address is:

Department of Fish and Wildlife 103 South Main Street, Building 10 S Waterbury, Vermont 05671-0501 Telephone 802-241-3700

- Provide a copy from the current Vermont Guide to Hunting or Fish Vermont, showing the project location. This map is useful for screening if the project is near a wildlife management area.
- If the project is near one of the wildlife management areas, provide a map of the area. Maps are available at www.anr.state.vt.us/wmamaps/index.html

National Trail

National Park Service

The Department of the Interior and the Department of Agriculture co-operate in the administration of the National Trails System. The National Park Service is responsible for the overall administration of the National Recreation Trails program on all lands (except National Forest Service lands), including non-Federal lands. The address is:

Pamela Underhill, Park Manager Donald Owen, Environmental Protection Specialist Appalachian National Scenic Trail National Park Service Harpers Ferry Center Harpers Ferry, West Virginia 25425 Telephone 304-535-6278

U. S. Forest Service

The Green Mountain National Forest is responsible for administering the Appalachian Trail within the Green Mountain National Forest. The address is:

Supervisor, Green Mountain and Finger Lakes National Forests 231 North Main Street Rutland, Vermont 05701 Telephone 802-747-6700

 Provide a map of the project location with respect to the Trail, if the proposed project is located near the Trail. (One source of maps of the Appalachian Trail in Vermont is the Long Trail Guide by the Green Mountain Club, available at most bookstores.)

Parks and Recreation Areas

Vermont Department of Forests, Parks, and Recreation

The Department of Forests, Parks, and Recreation is responsible for State Forests and State Parks. If an action has a potential impact on a State Forest or a State Park, notify the Commissioner and co-ordinate with the Department. The address is:

Department of Forests, Parks, and Recreation 103 South Main Street, Building 10 South Waterbury, Vermont 05671-0601 Telephone 802-241-3670

- Provide a copy from the current Vermont Guide to Hunting or Fish Vermont, showing the project location. This map is useful for screening if the project is near a state forest or park.
- Map showing the area affected by the proposed project, if the project is near a State Forest or State Park. Information on State Forests or State Parks can be found at www.state.vt.us/anr/fpr/lands/lands.htm.

Municipalities

Municipalities are responsible for their own parks and recreation areas, typically through zoning and other ordinances. The project's owner and the Town Clerk are two places to get information on local parks.

 Map showing the area affected by the proposed project, if the project is near a municipal park.

U. S. Army Corps of Engineers

The U. S. Army Corps of Engineers is responsible for recreation areas at five flood control reservoirs in Vermont.

U. S. Army Corps of Engineers Upper Connecticut River Basin Office Box 164 B Stoughton Pond Road Perkinsville, Vermont 05151 Telephone 802-886-8111

 Show the recreation areas on a project map, if the project is located near one of the recreation areas. This information is available on the Corps of Engineers' website at usace.army.mil/inet/functions/cw/cecwo/neweng.htm

The five flood control reservoirs in Vermont are:

Ball Mountain Lake, Jamaica North Hartland Lake North Springfield Lake Townshend Lake Union Village Dam, Thetford

National Forests

U. S. Forest Service

The Green Mountain National Forest has many recreational facilities including campgrounds, picnic areas, and trails for hikers, snowmobiles, and skiers. The address is:

Supervisor, Green Mountain and Finger Lakes National Forests 231 North Main Street Rutland, Vermont 05701

Telephone 802-747-6700

 Map showing the relation of the proposed project to the Green Mountain National Forest, if the proposed project is near or within the boundaries of the Forest.

3.2 Floodplains

Continued encroachments on floodplains decrease the natural flood-control capacity of these land areas, creates the need for expensive manmade flood-control measures and disaster-relief activities, and endangers both lives and property. In compliance with Executive Order 11988, "Floodplain Management", and USDA Departmental Regulation 9500-3, "Land Use Policy", it is USDA's policy to avoid to the extent possible:

- The long and short-term adverse impacts associated with the occupancy and modification of floodplains and
- Direct or indirect support of floodplain development wherever there is a practicable alternative.

Executive Order 11988, "Floodplain Management" requires Federal agencies to avoid actions, to the extent practicable, which will result in the location of facilities in floodplains and/or affect floodplain values. Facilities located in a floodplain may be damaged or destroyed by a flood or may change the flood-handling capability of the floodplain or the pattern or magnitude of the flood flow.

The relevant floodplain for most proposed projects is an area that has a 1-percent chance of a flood occurrence in a given year. The flood of this interval is referred to as the 100-year flood or the base flood. The floodplain management guidelines further require Federal agencies to apply the 0.2 percent or 500-year flood occurrence standard to the location of "critical facilities." Applicants should consider "critical facilities" as facilities whose loss would disrupt utility service to large areas for a considerable period of time or would disrupt utility service to critical facilities such as hospitals. Critical facilities include water treatment plants, wastewater treatment facilities, large pump stations, and centralized operations or communication facilities.

3.2.1 Floodplain Information

The types of information that should be provided include:

- Determine if the proposed project or any portion thereof is a critical facility as described above. That determines whether the special flood hazard area of importance is that of the 1% flood or of the 0.2% flood.
- Show location of all utility lines, appurtenances, and facilities on the Flood Insurance Rate Map.
- 3. Determine if the flood map has been revised by any Letter of Map Adjustment (LOMA) or Letter of Map Revision (LOMR).
- 4. If any portion of the project is in the special flood hazard area, also show the location on the Floodway and Flood Boundary Map.
- 5. Identify and evaluate practicable alternatives to locating facilities in a 100-year floodplain (include alternative sites or routes located outside the floodplain);
- 6. Identify and define the area of floodplain to be affected by the proposed project and evaluate the impacts to the floodplain;
- 7. If impacts cannot be avoided or if there is no practicable alternative to locating a facility or portion thereof in the floodplain fully document for submittal to RD/RUS

- a justification for this assertion; identify and develop measures to minimize the impacts as well as restore and preserve floodplain values; and
- 8. Status of local floodplain development requirements and permits;
- 9. Provide the page from the Community Status Book showing the community's status with regard to the flood insurance program if there will be any insurable structures built in the flood plain. (www.fema.gov/fema/csb.htm)

3.2.2 Potential Information Sources

Federal Emergency Management Agency

The Federal Emergency Management Agency provides flood insurance rate maps, including all types of letters of map change.

Maps can be obtained from the Map Service Center. The address is:

Map Service Center
P. O. Box 1038
Jessup, Maryland 20794-1038
Telephone 800-358-9616
(http://www.fema.gov/MSC/product.htm)

Community identification numbers can be found in the Community Status Book for each state. This is available at http://www.fema.gov/fema/csb.htm.

Vermont Floodplain Management Section

The Floodplain Management Section of the Vermont Agency of Natural Resources is the co-ordinating office at the state level for compliance with the National Flood Insurance Act. Its primary responsibility is to assist municipalities with determining if a property is in a flood hazard area (flood stage levels, floodplain boundaries), with developing floodplain management regulations, with identifying impacts, and with field survey. Karl Jurentkuff will make a field determination if one is needed for a particular property. The address is:

Karl Jurentkuff Vermont Agency of Natural Resources Water Quality Division Floodplain Management Section 103 South Main Street, Building 10 N Waterbury, Vermont 05676 Telephone 802-241-3770

Municipalities

Municipalities that participate in the Flood Insurance Program should have copies of the flood maps, the flood insurance study, and all letters of map change for that community available for viewing. Some municipalities have surveys of each structure in the floodplain that show elevations.

3.3 Wetlands

Executive Order 11990, "Protection of Wetlands" states that it is Federal policy to avoid to the extent possible the long and short-term adverse impacts associated with the destruction or modifications of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. Each agency, therefore, to the extent permitted by law, shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds that:

- 1. There is no practicable alternative to such construction, and
- The proposed project includes all practicable measures to minimize harm to wetlands which may result from such use. In making this finding the head of the agency may take into account economic, environmental, and other pertinent factors.

Section 363 of the Consolidated Farm and Rural Development Act prohibits placing facilities in a wetland with the exception of a utility line.

In addition, USDA through DR 9500-3, "Land Use Policy", discourages the unwarranted alteration of wetlands. To meet this objective, consider alternatives to construction in wetlands and limit the potential damage when activity affecting a wetland cannot be avoided. Where wetlands cannot be avoided, permits from the U. S. Army Corps of Engineers and mitigation measures to minimize adverse impacts to wetlands will be required.

Regulatory oversight of wetland issues fall under Section 404 of the Clean Water Act and is administered by the U. S. Army Corps of Engineers. Section 404 established a Federal permitting program that requires anyone who is proposing to place dredged or fill material into "waters of the United States" which includes wetlands, must obtain a permit from the U. S. Army Corps of Engineers (http://wetland.spk.usace.army.mil/).

To be consistent with Section 363, applicants that propose construction in a wetland must show that it is a utility line.

To be consistent with the Executive Order and DR 9500-3, applicants that propose to construct a facility in a wetland must submit documentation and justification to RD/RUS's satisfaction that demonstrates that there is no other practicable alternative to the proposed conversion.

For planning purposes, applicants will not be required to obtain jurisdictional delineations for wetlands (under the jurisdiction of the U. S. Army Corps of Engineers) unless a component of a proposed project proposes to construct a facility in a wetland. Applicants should contact the local U. S. Army Corps of Engineers office to determine specific permitting requirements. Placement of utility lines should be shown on soil survey maps to determine locations of affected wetlands (hydric soils) and to quantify the number of acres potentially affected.

The Corps of Engineers has issued Programmatic General Permit GP-58 to the State of Vermont. This Vermont Programmatic General Permit supersedes the Nationwide General Permits. The Programmatic General Permit divides activities into categories A

and B. If the activity does not meet the requirements of either category, then the applicant must apply for an individual permit. The Vermont Wetlands Office and the Corps of Engineers co-ordinate the review of applications. If the activity is in category A, the Vermont Wetlands Office receives the application; if in Category B or if an individual permit is required, the Corps of Engineers receives the application.

3.3.1 Wetlands Information

The types of information that should be provided include:

- Location of wetlands in relation to the project;
 For planning purposes, Soil Survey Maps (with hydric soils highlighted) from the
 Natural Resources Conservation Service and National Wetlands Inventory Maps
 from the U. S. Fish and Wildlife Service may be used. If the applicant already
 has more detailed information on wetlands, that more detailed information should
 be used.
- 2. Amount of wetlands to be physically affected by construction and the status of any wetland permits;
- 3. Whether any important, scarce, or vulnerable wetland from the Regional Wetlands Concept Plan (U. S. Fish & Wildlife Service, October 1990) is affected. If so, provide results of discussion with the U. S. Fish and Wildlife Service.
- 4. If applicable, the basis for the applicant's belief that no practicable alternative exists for any conversions of wetland areas;
- 5. Potential indirect and cumulative impacts to wetlands; and
- 6. If necessary any proposed mitigation measures to avoid or minimize impacts to wetlands.
- 7. Discuss compliance with Section 363.

3.3.2 Potential Information Sources

U. S. Fish and Wildlife Service

The U. S. Fish and Wildlife Service is responsible for preparing the maps of the National Wetlands Inventory. It has also identified important, scarce, and vulnerable wetlands in Vermont. The U. S. Fish and Wildlife Service can assist in site evaluation of wetlands on unusual projects or projects involving potentially significant impacts to wetlands. The address is:

Michael J. Bartlett, Supervisor New England Field Office U. S. Fish and Wildlife Service 400 Ralph Pill Marketplace 22 Bridge Street, Unit #1 Concord, New Hampshire 03301 Telephone 603-225-1411

Nationwide Wetlands Inventory Maps (available for many areas and compatible with the scale of USGS maps). To determine if an area has been mapped or to obtain copies, contact: National Cartographic Information Center; USGS; 507 National Center; Reston, Virginia 22092; Telephone: (703) 860-6045 (http://www.nwi.fws.gov/)

Natural Resources Conservation Service

The district office is responsible for making wetlands determinations on all agricultural lands for all Federal permits under a 1994 Memorandum of Agreement among USDA, the U. S. Environmental Protection Agency, the U. S. Fish and Wildlife Service, and the Corps of Engineers. Addresses for offices of the Natural Resources Conservation Service are available on the web at www.vt.nrcs.usda.gov/vtloca.htm or through their state office.

Natural Resources Conservation Service 69 Union Street Winooski, Vermont 05404 802-951-6796

U. S. Army Corps of Engineers

The U. S. Army Corps of Engineers has a field office responsible for Vermont. The address is:

U. S. Army Corps of Engineers Vermont Project Office Camp Johnson, Building 10-18 Colchester, Vermont 05446 Telephone 802-655-0334

Vermont Wetlands Office

The Vermont Wetlands Office has jurisdiction over wetlands in Vermont as authorized by the Vermont Wetlands Act. The Vermont Wetlands Rules rely heavily on the National Wetlands Inventory Maps of the U. S. Fish and Wildlife Service.

The Wetlands Office has completed its own wetlands maps. The maps will be printed by town and will show the same wetlands as on the maps of the National Wetlands Inventory. These maps will be in color and will be available beginning in July from the Wetlands Office.

The Wetlands Office staff can provide a site visit for small projects to determine if a significant wetland or buffer zone is present. They can also visit large projects but cannot delineate wetlands boundaries for them. The Office also provides National Wetlands Inventory Maps for Vermont. The address is:

Carl Pagel, State Wetlands Co-ordinator Vermont Agency of Natural Resources Department of Environmental Conservation 103 South Main Street, Building 10 N Waterbury, Vermont 05671-0408 Telephone 802-241-3770

Municipalities

Municipalities may also regulate wetlands. A municipality that regulates wetlands typically does so in its zoning ordinance.

3.4 Cultural Resources

Evaluation of cultural resources includes both compliance with section 106 of the National Historic Preservation Act and a consideration of visual aesthetics.

The National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470 *et seq.*) and the Advisory Council on Historic Preservation's implementing regulations, 36 CFR Part 800 (Section 106 regulations), requires Federal agencies to take into account the effect their actions may have on historic properties that are within the proposed project's area of potential effect. This evaluation must take place prior to the carrying out of such actions. The area of potential effect is the geographic area or areas within which a proposed project may cause changes in the character or use of historic properties. Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places. This term includes, for the purposes of the Section 106 regulations, artifacts, records, and remains that are related to and located within such properties. The term "eligible for inclusion in the National Register" includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register of Historic Properties listing criteria.

To fully support a cultural resources review, it is necessary to identify all historic properties within the proposed project's defined area of potential effect. The applicant should retain the services of a cultural resource specialist who meets the U.S. Department of the Interior's Secretary of the Interior's Professional Qualification Standards (48 FR 44738-9) to identify historic properties and determine what effect the proposed project will have on these properties.

A cultural resources specialist is an archaeologist or an architectural historian, depending on the nature of the proposed undertaking.

The archaeologist or architectural historian should first conduct a preliminary evaluation of the project's potential for effects on historic properties. This initial step should be carried out as early as possible in project planning and involves a field inspection of the project area. It does not involve a study. On-site activities during this initial process are limited and, in the case of archaeology, may include coring with a 1" – 2" hand-operated soil auger. The archaeologist or historian will either recommend a finding of "no historic properties affected" or the need for additional field work. If the recommendation is a finding of "no historic properties affected", Rural Development will notify the State Historic Preservation Officer. Any additional field work, such as archaeological studies, must be co-ordinated with Rural Development and the State Historic Preservation Officer before it begins.

If, after additional assessment or field studies, the archaeologist or historian recommends a determination of "no adverse effect", Rural Development will notify the State Historic Preservation Officer of that finding. If the archaeologist or historian

recommends a determination of "adverse effect", Rural Development will notify the State Historic Preservation Officer and the Advisory Council on Historic Preservation of that finding.

The State Historic Preservation Officer reviews the determination of effect on historic properties prepared by a consultant and normally has 30 days to respond. If the State Historic Preservation Officer fails to respond within 30 days to the applicant's request, the applicant should not automatically assume that the State Historic Preservation Officer has no concerns regarding the proposed project. The applicant should again contact the State Historic Preservation Officer and inquire about the status of the project's review.

Applicants are advised to avoid adversely affecting any historic property prior to the completion of the environmental review process. Such actions may result in the loss of financial assistance. When an historic property is destroyed or irreparably harmed with the express purpose of circumventing or preordaining the outcome of a Section 106 review (e.g., demolition or removal of all or part of the property) this is called anticipatory demolition. RD/RUS is required to withhold any financial assistance until at such time, in consultation with the Advisory Council of Historic Preservation, it is determined and documented that "circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant."

3.4.1 Historic Property Information

The types of information that should be provided include:

- 1. Identification and determination of the effect on historic properties within the proposed project's area of potential affect;
- 2. Document methods used to identify historic properties within the proposed project's area of potential effect;
- Document efforts made to identify and solicit the views of Indian tribes and interested persons;
- 4. If a historic property may be affected, discuss the alternatives that were considered that would avoid affecting the historic property;
- 5. A copy of all correspondence to and from the State Historic Preservation Officer;
- A discussion of mitigation measures proposed to either avoid or minimize any adverse effects to historic properties; and
- A copy of any surveys performed (indicate cost of survey and number of acres surveyed). This information will be used by RD/RUS as input into the Annual Archeological Report to Congress compiled by the NPS;

3.4.2 Potential Information Sources

National Register of Historic Places (http://www.cr.nps.gov/nr)

Vermont Division for Historic Preservation

The Division for Historic Preservation is the State Historic Preservation Office. The Division can provide information from its files on historical buildings and archaeological sites to assist in determining if an action has an effect on a historic property. The Division maintains lists of qualified archaeologists and architectural historians. The address is:

Emily Wadhams, State Historic Preservation Officer

Attn.: Suzanne Jamele

Division for Historic Preservation National Life Building, Drawer 20 Montpelier, Vermont 05620-0501

Telephone 802-828-3211

www.uvm.edu/~vhnet/hpres/org/vdhp/hsi1.html

Some useful publications are:

The Historic Architecture of Addison County
The Historic Architecture of Rutland County
Vermont Historic Sites and Structures Survey

Advisory Council on Historic Preservation

The Advisory Council becomes involved when a proposed action will have an adverse effect on a property included in or eligible for the National Register. If the applicant determines that there is an adverse effect, Rural Development must notify the Advisory Council and work with them to avoid or mitigate the effect. The address is:

Advisory Council on Historic Preservation Eastern Division of Project Review The Old Post Office Building 1100 Pennsylvania Ave. NW #809 Washington, D. C. 20004 Telephone 202-606-8505

Current information on the section 106 process is available at (http://www.achp.gov/index.html).

State or local historical or archaeological societies.

The Division for Historic Preservation can provide information on these societies. Often the applicant can provide information on any local society.

<u>Indian tribes and interested persons.</u>

The Division for Historic Preservation can provide some information on the tribes and possibly on interested persons.

For more information see Exhibit F-2.

Exhibit F-2 is out of date. For current information, use the information from the Advisory Council's website.

3.4.3 Visual Aesthetics

The visual quality of an area may be affected by the introduction of new buildings or structures. These effects may be significant to historic properties, cultural resources, traditional cultural places, and cultural landscapes; in areas of scenic beauty, scenic overlooks, scenic highways, wilderness areas, parks, national forests; or along wild and scenic, recreational, or nationwide inventory rivers (see also Section 3.1.3, Formally Classified Lands). Aesthetics should be considered in all projects. Moreover, for projects in visually sensitive areas, reasonable efforts should be taken to avoid these areas entirely, or to design, construct and operate the proposed project in such a way that aesthetic impacts are minimized.

3.4.3.1 Aesthetic Information

The types of information that should be provided include:

- 1. Identify all visually sensitive areas that are in the vicinity of the proposed project;
- 2. How much of this area will be visually affected by the proposed project and from how many viewing locations the proposed project may be seen; and,
- 3. Mitigation efforts that will be taken to minimize impacts. This may include such methods, when appropriate, as vegetative zones around the proposed facilities.

3.4.3.2 Potential Information Sources

- Exhibits used to document criterion 8 (the portions for scenic or natural beauty and aesthetics) for a permit under Vermont's Land Use and Development Law (Act 250).
- Exhibits used to document aesthetics for a local permit or a local design review board's evaluation.
- The owner of a formally classified land if there is a visual impact on such land.
- The Division for Historic Preservation or a historical architect, if there is a
 potential for a visual impact to a historic site.

3.5 Biological Resources

Threatened and Endangered Species. There are many plant and animal species that are threatened with extinction or exist in greatly reduced numbers partly as a result of human activities. The Endangered Species Act of 1973, establishes a national program for the conservation and protection of threatened and endangered species of plants and animals and the preservation of habitats upon which they depend. Under Section 7 of the Endangered Species Act, Federal agencies are required to consult with U. S. Fish & Wildlife Service and/or the National Marine Fisheries Service (National Marine Fisheries Service) for all threatened and endangered species and species that inhabit coastal areas or are anadromous (fish born in freshwater who spend most of their life at sea and return to fresh water to spawn). The consultation is to ensure that RD/RUS's actions do not jeopardize the continued existence of any federally-listed threatened or endangered species or result in the destruction or adverse modification of a critical habitat. When a proposed project cannot avoid critical habitat areas, the

Endangered Species Act requires mitigation measures or reasonable and prudent alternatives to be implemented that reduces an impact to minimal levels. Such mitigation measures or project alternatives must be negotiated between RD/RUS, the applicant, and the U. S. Fish & Wildlife Service or National Marine Fisheries Service. Therefore, if it appears the proposed project may affect (1) a federally-listed threatened or endangered species or its critical habitat or (2) a proposed threatened or endangered species or its proposed critical habitat, the applicant should contact the Rural Development State Environmental Coordinator or Processing Office as soon as possible and RD/RUS will initiated discussions with the U. S. Fish & Wildlife Service or National Marine Fisheries Service.

State agencies should be contacted for information on State-listed species and concerns. In some instances, the State may have more detailed information on federally-listed or proposed species and/or critical habitat than the U. S. Fish & Wildlife Service. This information will help RD/RUS determine a proposed project's effect on a particular species.

It should be noted that proposed species have no legal protection under the Endangered Species Act. However, project impacts to these species should be considered when preparing the Environmental Report because proposed species may become listed species and the listing would effect further project actions.

Fish and Wildlife Resources. In addition to the concern for threatened or endangered species, the applicant should take into account impacts that the proposed project may have on all fish and wildlife resources. Unnecessary adverse impacts should be avoided, to the extent practicable.

Vegetation provides habitat for a variety of wildlife and acts to stabilize soils and prevent erosion. In addition, information on vegetation can be used in evaluating potential impacts to threatened and endangered species and critical habitats.

3.5.1 Biological Resources Information

Threatened and Endangered Species.

The types of information that should be provided include:

- A list of federally-listed or proposed threatened or endangered species and a delineation of any critical habitat in the proposed project's and any alternatives' area of potential effect;
- Potential impacts of the proposed project and alternatives considered on any federally-listed or proposed threatened or endangered species and proximity to a designated critical habitat;
- 3. Correspondence with the U. S. Fish & Wildlife Service and National Marine Fisheries Service, if necessary, concerning whether or not the project is likely to affect a listed or proposed species or its listed critical habitat;
- 4. Similar information as described in 1 through 3 above for any State listed or proposed threatened or endangered species; and,
- 5. Mitigation measures, if avoidance is not practicable.
- A copy of the State Significant Habitat Map.

Fish and Wildlife

The types of information that should be provided include:

- A brief description of the fish and wildlife species in the proposed project's area of potential effect; and
- A discussion of possible impacts to fish and wildlife resources. These impacts
 may result from sedimentation, ground clearing, stream or river flow impedance,
 forest fragmentation, and hunting or fishing pressure due to increased access to
 an area.

Include in the discussion deer wintering areas and black bear habitat.

Vegetation

The types of information that should be provided include:

- 1. A brief description of the vegetation in the proposed project's area of potential effect, the relative amount of each vegetation type, and the extent to which each type of vegetation will be affected;
- 2. An estimate of the amount of vegetation clearing required for the proposed project and each alternative considered;
- 3. The short and long-term effects of proposed vegetative clearing, including those related to the ROW maintenance practices; and,
- 4. A description of vegetation clearing and future maintenance practices. Special areas of concern such as riparian or wetland areas may require more detailed information.

3.5.2 Potential Information Sources

U. S. Fish and Wildlife Service

This office must be contacted for each project unless the relevant State has made special arrangements to provide information on threatened or endangered species. The U. S. Fish and Wildlife Service is responsible to identify threatened species and endangered species and to develop recovery plans. They can provide site visits and consultation to Rural Development on larger projects. The address is:

Michael J. Bartlett, Supervisor New England Field Office U. S. Fish and Wildlife Service 400 Ralph Pill Marketplace 22 Bridge Street, Unit #1 Concord, New Hampshire 03301 Telephone 603-225-1411

The U. S. Fish and Wildlife Service has a Recovery Plan for each listed species that contains information on the habitat required by each species and known locations (current and historical) of the species. A negative finding from the Vermont Non-Game and Natural Heritage Program may be used instead of a contact with the U. S. Fish and Wildlife Service. However, if the Vermont Program identifies a potential impact on a

federally listed species or habitat, then the U. S. Fish and Wildlife Service must be contacted.

Vermont Non-Game and Natural Heritage Program

The Vermont Non-Game and Natural Heritage Program is responsible for identifying endangered or threatened species and for identifying significant habitat. They maintain maps identifying significant habitat for each town within the state. The address is:

Everett Marshall
Vermont Fish and Wildlife Department
Vermont Nongame and Natural Heritage Program
103 South Main Street, Building 10-South
Waterbury, Vermont 05671-0501
Telephone 802-241-3700

The Program has a Significant Habitat Map which shows known locations of endangered or threatened species and deer wintering areas.

Vermont Department of Fish and Game

The Department has developed deer habitat maps (included on Significant Habitat Maps) and a map Black Bear Habitat in Vermont (1989). It also is involved with administration of various laws designed to protect fisheries. Among them is 10 VSA Sec. 4607 which states that a structure will not be placed in a stream or river which impedes the movement of fish without permission of the Fish and Game Department. Likewise for impoundments of 500,000 cubic feet or greater, a developer must obtain a Certificate of Public Good under 10 VSA Sections 1080 - 1105. Site-specific project information may be obtained from the Wildlife or Habitat Biologists who are located in each of the Regional Offices of the Department of Environmental Conservation. The addresses of these offices are given in the Field Guide to the Vermont Agency of Natural Resources (www.anr.state.vt.us/fguide/fguide.htm). For more information relative to State of Vermont fisheries and wildlife the address is:

Department of Fish and Wildlife 103 South Main Street, Building 10 S Waterbury, Vermont 05671-0501 Telephone 802-241-3700

<u>Administering agency</u> on Federal, State, and local government managed lands.

Natural Resources Conservation Service area or field office.

3.6 Water Quality Issues

This section is concerned with water quality issues as they relate to discharges from wastewater treatment or solid water facilities; surface or ground water appropriations for potable water treatment facilities; ground water protection programs - sole source aquifers and recharge areas; and water quality degradation from temporary construction activities. Water quality changes can impact other environmental resources such as

wetlands, wildlife populations, and others. These impacts can also reach a considerable distance beyond the project location. The possible effects that the proposed project and alternatives considered could have on water quality should be addressed in the Environmental Report.

3.6.1 Water Quality Information

The types of information that should be provided include:

- 1. Identification and location of waterways that may be receiving streams for effluent discharges or used for water appropriations for potable water;
- Handling of wastewater disposal for facilities;
- Identification of all aquifers utilized as a supply for potable water or that may be impacted from runoff, infiltration by or any operational activities from wastewater and solid waste facilities;
- 4. Groundwater protection programs for sole source aquifers or recharge areas should be noted;
- If the watershed that the proposed project is located in is under a management plan, the plan and the proposed project's compliance with the plan should be noted; and
- Potential water quality degradation caused by temporary construction activities and any mitigation measures that are proposed to avoid or minimize any adverse environmental effects.

3.6.2 Potential Information Sources

U. S. Army Corps of Engineers.

The Corps of Engineers is responsible for federal permits involving discharge of dredged or fill material into the waters of the United States, including wetlands. The Corps is also responsible for federal permits for all structures and work in navigable waters of the United States. The Corps of Engineers can assist in site evaluation on unusual projects or projects involving potentially significant impacts to water quality. The address is:

U. S. Army Corps of Engineers Vermont Project Office Camp Johnson, Building 10-18 Colchester, Vermont 05446 Telephone 802-655-0334

Vermont Department of Environmental Conservation

The Vermont Department of Environmental Conservation of the Agency of Natural Resources is responsible for administering most of the State's laws and rules relating to water quality. The divisions need to be contacted where appropriate. There are regional offices in Barre, Essex Junction, Pittsford, Rutland, St. Johnsbury, and Springfield. Regional engineers are responsible for the administrative processing and review of applications in the regional offices. "A Field Guide to the Agency of Natural

Resources" is a helpful guide to responsibilities within the Agency. The printed version is available from the Agency. An electronic version is available at www.anr.state.vt.us/fguide/fguide.htm. The address is:

Vermont Department of Environmental Conservation Building 1 South 103 South Main Street Waterbury, Vermont 05671 Telephone 802-241-3800

Wastewater Management Division, Marilyn Davis, Director, 802-241-3822. Waste Management Division, P. Howard Flanders, Director, 802-241-3888. Facilities Engineering Division, Larry Fitch, Director, 802-241-3737. Water Quality Division, Wallace McLean, Director, 802-241-3777. Water Supply Division, Jay Rutherford, Director, 802-241-3400.

Vermont Department of Health

The Vermont Department of Health is responsible for regulating and approving private water supplies and for risk assessment involving contamination of public water supplies. The address is:

Vermont Department of Health 60 Main Street, P. O. Box 70 Burlington, Vermont 05401 Telephone 802-863-7220

U. S. Environmental Protection Agency

- National Pollutant Discharge Elimination System State Agencies/U.S. Environmental Protection Agency - requirements (http://www.epa.gov/owm/npdes.htm);
- Non-Point Source Pollution (storm water runoff) U.S. Environmental Protection Agency. Under the National Pollutant Discharge Elimination System storm water program (Phase I), a permit is required for land clearing activities that exceed 5 acres. Proposed Phase II National Pollutant Discharge Elimination System storm water regulations would expand this national program to construction sites that disturb 1 to 5 acres. The Phase II regulations will be finalized by March 1, 1999 (http://www.epa.gov/OWOW/NPS/);
- Ground water protection programs/Sole Source Aquifers (http://www.epa.gov/OGWDW/ssanp.html)
 There are no sole source aquifers in Vermont.

3.7 Coastal Resources

There are no coastal resources in Vermont.

3.8 Socio-economic Issues/Environmental Justice

Proposed projects funded by or in part by RD/RUS have a potential to affect the socio-economic conditions of the areas being served. Applicants should be aware of potential effects to the socio-economic makeup of the area proposed to be served and be prepared to discuss these effects. Effects could be beneficial or adverse. In addition, applicants need to determine if their proposed project has or may have a disproportionately high and adverse human health or environmental effects on minority and low-income populations. Executive Order 12989 "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations", dated February 11, 1994, and USDA DR 5600-2 "Environmental Justice", dated December 15, 1997, require the consideration of environmental justice issues into National Environmental Policy Act environmental reviews. These issues include:

- 1. Analyzing for the potential of disproportionately high and adverse human health or environmental effects to minority and low-income populations;
- Providing opportunities for minority and low-income populations to participate in the National Environmental Policy Act process if these populations may be adversely affected; and,
- 3. Identifying mitigation measures that would reduce adverse human health or environmental effects to minority and low-income populations.

3.8.1 Socio-economic Issues

3.8.1.1 Socio-economic Information

Part of the USDA, Rural Development's mission is to support sound development of rural communities and provide economic opportunities for farm and rural residents. This mission may significantly affect the socio-economic make-up of the area to be served. Applicants should, in conjunction with an analysis of existing land uses and any projected land use changes caused by the proposed project, be aware of and be prepared to discuss any potential changes to an area's socio-economic make-up.

3.8.1.2 Potential Information Sources

- U.S. Department of Commerce, Census Bureau (http://www.census.gov);
 and
- State Census Data Centers (http://www.census.gov/sdc/www/)

3.8.2 Environmental Justice Issues

3.8.2.1 Environmental Justice Information

Applicants must include an analysis of the potential impact of a proposed project, or any part thereof, that may pose disproportionately high and adverse human health or environmental effects to minority and low-income populations. The environmental justice analysis in the Environmental Report should determine if the proposed project will be located in a minority or low-income community and, if so, analyze if the location

of the proposed project will have, or be perceived to have, disproportionately high adverse human health or environmental effects to the community. If the project will have no disproportionate effects, this should be stated. If the project is to be located in a minority or low-income community and will have, or may be perceived to have, disproportionately high or adverse human health or environmental effects to the community, the analysis must include a description of the efforts made to include minority and low-income populations into the National Environmental Policy Act process. These efforts may include public notices and special outreach efforts aimed at these populations. When it is determined that there is no practicable alternative to locating a project in a minority or low-income community and if there will be disproportionately high human health or environmental effects, the analysis must include a discussion of the mitigation measures evaluated that would off-set or minimize these effects.

3.8.2.2 Potential Information Sources

- 1. Local Elected Officials/agencies;
- 2. Rural Development Civil Rights Coordinators;
- 3. State agencies/U.S. Environmental Protection Agency (http://www.epa.gov/swerosps/ej/);
- 4. U.S. Department of Commerce, Census Bureau (http://www.census.gov);
- 5. Minority Business and Trade Groups;
- 6. Civic Organizations;
- 7. Tribal Officials;
- 8. Religious Groups/Churches;
- 9. Civil Rights Organizations; and,
- 10. Senior Citizens Groups.

For more information see Exhibit F-3.

3.9 Miscellaneous Issues

The types of environmental issues that may be related to project designs and requirements are complex and highly site-specific. The primary issues to be considered are listed in the above sections, however, applicants need to be aware that other less significant issues may arise during a proposed project's planning and design activities. The following subsections are some of the more common miscellaneous issues that may come up but is not meant to be an all-inclusive list.

3.9.1 Air Quality

During construction there will be emissions from vehicles and other construction equipment or fugitive dust from construction activities. Although specific Federal regulations exist which address these emissions, a State Implementation Plan (SIP) provides the framework for air emission control within each State.

Designated State air pollution program administrators regulate air emissions from facilities within their states. If the project qualifies as a major source (having a significant emission rate for one or more pollutants), compliance with Best Available Control Technology may be required.

The applicant should contact the State air pollution program administrator responsible for enforcing the SIP and find out whether its construction activities must comply with the SIP.

In addition to facility air emissions, applicants should be aware of the issue of the offsite migration of odors.

3.9.1.1 Air Quality Information

The types of information that should be provided include:

- 1. Sources and types of any air emissions from the proposed project;
- 2. Compliance with the SIP, either through agency exemption or project review;
- 3. Anticipated effects (including duration) on air quality from construction activities, especially if the enforcement agency has not provided an exemption or project review;
- 4. Status of project area regarding compliance with ambient air quality standards and location of Class I areas:
- 5. Analysis of Best Available Control Technologies, if required for air quality permit application;
- 6. Anticipated effects on air quality from operation of the facility; and,
- 7. Sources of odors and mitigation measures necessary to minimize off-site migration of odors.

3.9.1.2 Potential Information Sources

Vermont Air Pollution Control Division

The Vermont Air Pollution Control Division has overall responsibility for the State air quality program. The division can provide information about permits, registration, Act 250 applications, determination of air quality impacts from specific projects, and enforcement. The address is:

Richard A. Valentinetti, Director Air Pollution Control Officer Air Pollution Control Division 103 South Main Street, Building 3 South Waterbury, Vermont 05671-0402 Telephone 802-241-3840

Two useful items available from the division are:

- Towns within 100 kilometers of a Class I air quality area, The Air Pollution Control Permitting Handbook
- Classification of Air Contaminant Sources, Air Pollution Control Regulations

U. S. Forest Service

The U. S. Forest Service is responsible for co-ordinating air quality issues regarding three Wilderness Areas in Vermont and New Hampshire. If a major air pollution source is located within 100 kilometers of a Class I Air Quality region, co-ordinate with the U. S. Forest Service. The addresses are:

Supervisor, Green Mountain and Finger Lakes National Forests 231 North Main Street Rutland, Vermont 05701 Telephone 802-747-6700

and

Supervisor, White Mountain National Forest 719 Main Street Laconia, New Hampshire 03246 Telephone 603-528-8721

- State and Local Air Pollution Program Administrators (http://www.4cleanair.org/states.html); and
- U.S. Environmental Protection Agency (http://www.epa.gov/oar/oaqps/permits/).
 This internet site provides general information on operating permits for air

pollution sources. The permits themselves are issued by the State of Vermont.

3.9.2 Transportation

Information concerning this issue may be required if the proposed project proposes the construction of highway crossings or elevated water storage facilities especially where these facilities are located adjacent to airports (including airport clearance or accident zones), roads, highways, railroads, and navigable waterways. Permits may be required from the applicable agencies prior to construction.

3.9.2.1 Transportation Information

The types of information that should be provided include:

- 1. Changes or modification of traffic patterns as a result of the proposed project;
- 2. Fuel and chemical delivery requirements for treatment facilities;
- 3. Potential impairment of highway safety or navigable waterways; and
- 4. Location of any airports that could be close to proposed water tanks or other potential obstacles. Specify any airport clearance or accident zones.

3.9.2.2 Potential Information Sources

- U. S. Department of Transportation (USDOT), Federal Highway Administration (http://www.fhwa.dot.gov/);
- 2. State transportation agencies; see (http://www.fhwa.dot.gov/related.html) "Transportation Related State Web Sites of Our State Partners"; and
- 3. Federal Aviation Administration (FAA) (http://www.faa.gov/centers.htm).
- 4. For any military facilities, contact the facilities Public Affairs Office.

3.9.3 Noise

Information concerning this issue may be required for the construction and operation of facilities, especially those facilities that may be located in or near noise sensitive developments such as residential areas. The most current noise assessment methodology is contained in the "Noise Guidebook", published by the U.S. Department of Housing and Urban Development, Office of Community and Development.

3.9.3.1 Noise Information

The types of information that should be provided include:

- Noise levels from construction and operation of facilities at nearby noise sensitive development; and,
- 2. Sound attenuation or any other mitigation measures to be taken to reduce or eliminate adverse effects from unacceptable noise levels.

3.9.3.2 Potential Information Sources

- 1. State and local planning or environmental agencies;
- 2. U.S. Environmental Protection Agency Regional Offices; and
- 3. U. S. Department of Housing and Urban Development, Office of Community and Development, Washington D.C.

3.9.4 Other Miscellaneous Issues

The following issues should be discussed as appropriate to a particular proposed project.

3.9.4.1 Radon

Discuss potential issues of radon in air or in water supplies.

<u>The Environmental Protection Agency</u> has developed a recommended action level for reducing radon in air in homes. They have prepared information on methods of reduction of radon in homes. The U. S. Environmental Protection Agency has publications on radon available at www.epa.gov/iag/radon/pubs/index.html.

The Vermont Department of Health also can provide information on radon.

Patricia Jacobson
Vermont Department of Health
Division of Occupational and Radiological Health
108 Cherry Street
Burlington, Vermont 05402
Telephone: 802-865-7730
800-640-0601

3.9.4.2 Solid Waste Management

Discuss compliance with the Vermont solid waste management rules, if the project generates any of the special wastes (asbestos; infectious waste; hazardous waste from conditionally exempt generators; liquid containers with a capacity greater than 30 gallons; liquid wastes including septage and sludge; mercury-added consumer products) or a significant amount of solid waste.

Department of Environmental Conservation Waste Management Division 103 So. Main Street Waterbury, Vermont 05671-3444 Telephone 802-241-3444

3.9.4.3 Hazardous Substances

Indicate whether a proposed project involves a generator of hazardous substances. If so, discuss compliance with the Vermont Hazardous Waste Management Regulations. A generator is classified as a conditionally exempt generator, a small quantity generator or a large quantity generator.

Discuss whether there are any hazardous waste sites that are near the project and possible interactions between them and the proposed project. More than 1,000 hazardous waste sites have been identified across the state, many of which are dump sites. The State maintains a list of the sites. It is available at www.anr.state.vt.us/dec/wastediv/rcra/hazsites.htm

Vermont Department of Environmental Conservation

The Waste Management Division of the Department is responsible for administering the hazardous waste program. The address is:

Vermont Department of Environmental Conservation Hazardous Materials Management Division 103 South Main Street, West Building Waterbury, Vermont 05671-0404 Telephone 802-241-3888

3.9.4.4 Underground Storage Tank

If the site has an underground storage tank, discuss compliance with the Vermont Underground Storage Tank Regulations. A list of underground storage tanks that comply with Vermont's underground storage tank regulations can be found at www.anr.state.vt.us/dec/wastediv/ust/tankintr.htm.

Vermont Department of Environmental Conservation

The Waste Management Division is responsible for administering the underground storage tank program in Vermont. They have issued regulations to implement the program. They are responsible to ensure that owners register tanks, monitor tanks when in service, and close tanks no longer in service. The address is:

Ted Unkles
Department of Environmental Conservation
Waste Management Division
103 South Main Street, West Office Building
Waterbury, Vermont 05671-0404
Telephone 802-241-3888

3.10 Intergovernmental Review

The Office of the Governor notified Rural Development on July 10, 1996 that the State of Vermont no longer participates in intergovernmental review because "there are now extant various other processes which accomplish the goals desired at both the local and State levels."

Regional Planning Commissions

Two regional planning commissions have requested that Rural Development notify them as part of the intergovernmental review process. The addresses are:

Northwest Regional Planning Commission 140 So. Main Street St. Albans, Vermont 05478 Telephone 802-524-5958

and

Windham Regional Commission 139 Main Street, Suite 505 Brattleboro, Vermont 05301 Telephone 802-257-4547

4.0 AGENCY CORRESPONDENCE

In completing an Environmental Report, coordination with appropriate environmental regulatory agencies may require two interactions. The first interaction may involve basic data collection, however much of this effort can be completed using the various Internet websites offered by applicable agencies. The second interaction may be required in order to obtain the concurrence of or agreement with any conclusions drawn from the evaluation of this data for potential environmental effects of the proposed project and any alternatives considered. For example, if the applicant, based on data collected from the U. S. Fish & Wildlife Service or from a State Agency that has been authorized to assist the U.S. Fish and Wildlife in determining the presence of such species, concludes that no threatened and endangered species will be affected by the proposed project, the applicant needs to obtain the concurrence in writing from these agencies. If the proposed project will affect an endangered species, all documentation regarding coordination with U. S. Fish & Wildlife Service must be included in the Environmental Report.

The applicant should make a reasonable effort to obtain written responses from agencies and others that have specialized information about or regulatory oversight concerning an environmental resource or issue. Normally, they should be given a minimum of 30 days to respond to a written request for comments. If no written response is received within the requested time period, the applicant should re-contact the agency by telephone concerning whether it intends to comment on the proposed project in writing. In certain cases where time is of the essence, it may be prudent to telephone the agency a few days after sending the written request to determine whether the information has been received. Written documentation of follow-up telephone conversations or meetings with agencies must be included in the Environmental Report.

It is recognized that applicants cannot force an agency to comment and that unreasonable requests for time extensions may unduly delay a project. It is not intended that an Environmental Report be stymied under such circumstances. When a applicant has made reasonable efforts to obtain an agency response and has not received one, the applicant should document its efforts in the Environmental Report.

4.1 Reaction to Agency Comments

When an agency raises concerns about a proposed project, recommends further studies, or suggests mitigation measures to offset environmental impacts, the applicant should consult with the Rural Development State Environmental Coordinator or Processing Office for advice. IT IS ESSENTIAL THAT THE APPLICANT ADDRESS ALL SUCH COMMENTS, RECOMMENDATIONS, OR SUGGESTIONS IN THE Environmental Report.

The applicant shall seek to resolve all outstanding concerns with regulatory agencies prior to submitting the Environmental Report to RD/RUS. If, subsequent to contacting regulatory agencies, an applicant has unresolved concerns about a particular issue,

they shall contact the Rural Development State Environmental Coordinator or Processing Office for assistance. The Rural Development State Environmental Coordinator and Processing Office shall assist the applicant in resolving all concerns with regulatory agencies.

In certain instances, comments from Federal, State, or local agencies may raise environmental issues of concern to State agencies which are not afforded specific protection under Federal laws and regulations (e.g., a State listed endangered species which is not on the Federal list). Such comments on State and local environmental issues should also be discussed in the Environmental Report. Taking such matters into account may be essential in securing State and local permits and approvals. Moreover, in considering the effect of a project on the quality of the human environment, the National Environmental Policy Act and the Council on Environmental Quality regulations require Federal agencies to consider overall environmental impacts, not merely those environmental resources specifically protected by Federal laws, regulations, or Executive Orders.

5.0 PUBLIC NOTICES

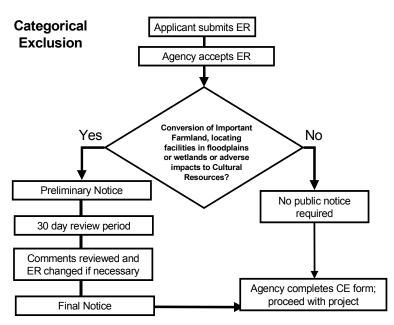
Public notices are normally required on two occasions for most proposed projects. A proposed project classified as a categorical exclusion may require a preliminary notice and a final notice if certain resources will be directly converted or adversely affected. A proposed project classified as an environmental assessment will require a public notice announcing the availability of the environmental assessment for public review and a notice announcing RD/RUS's environmental decision or a Finding of No Significant Impact. Templates for public notices are in Exhibit B.

5.1 Categorical Exclusion

Where there is a proposal to convert important farmland, locate facilities in wetlands or

floodplains, or adversely affect a cultural resource, the public will be provided an opportunity to review and comment on the proposed project. This notice is done in two stages, a preliminary notice announcing the proposed project and a final notice where RD/RUS states its decision regarding the proposed project.

The purpose of the preliminary notice is to



inform the public of the proposed conversion and request their comments on alternate sites or actions that would avoid or minimize the conversion (see Exhibit B.1). The preliminary notice is issued after RD/RUS accepts the Environmental Report and has determined the project is properly classified as a categorical exclusion. The public is provided a nominal 30-day period to submit comments. RD/RUS and the applicant will review the comments and make any appropriate changes to the Environmental Report.

The purpose of the final notice is a follow-up to the preliminary notice and is intended to inform the public of RD/RUS's decision on the conversion (see Exhibit B.2). When conversion will occur, the final notice will inform the public that RD/RUS has determined that there is no practicable alternative to avoiding the conversion and provide a reason(s) for that decision. The final notice is issued after the preliminary notice review period and after all public comments have been evaluated. There is no review period for the final notice.

The table below summarizes the categorical exclusion public notice requirements.

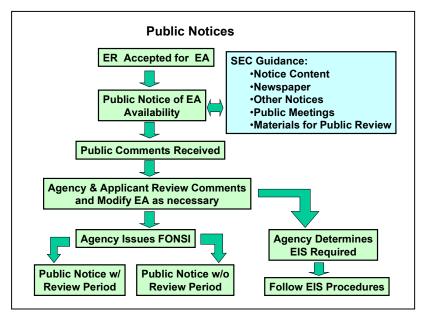
Categorical Exclusion Public Notice Requirements							
Proposed Conversion of Resource	Preliminary Review Period ³ (days)		Final Notice	Review Period (days)			
None	N/A	N/A	N/A	N/A			
Important Farmland ¹	Yes	30	Yes	0			
Wetlands	Yes	30	Yes	0			
Floodplains	Yes	30	Yes	0			
Cultural Resources ²	Yes	30	Yes	0			

- Includes Important Farmland (as defined by DR 9500-3)
- 2. For Cultural Resources in the context of the NHPA, the term "converted" refers to an "adverse effect '
- Comment periods are calculated from the date of the first publication.

5.2 **Environmental** Assessment

When RD/RUS approves and accepts the Environmental Report as its environmental assessment, two public notices are published. The first informs the public of the availability of the environmental assessment. The second, a FONSI, informs the public of RD/RUS's decision.

The purpose of the first notice is to announce the availability of the environmental assessment for public review. After RD/RUS has



determined that the Environmental Report will serve as its environmental assessment, RD/RUS will authorize the applicant to publish a public notice in a newspaper(s) of general circulation in the area where the proposed project is located (see B.3). If the proposed project proposes to convert important farmland, construct facilities in floodplains or wetlands, or adversely affect a cultural resource, the information required in Preliminary Notice listed in Exhibit B.1 should be integrated in the environmental assessment notice. The public is provided a nominal 30-day period to submit comments. RD/RUS and the applicant will review the comments and make appropriate changes to the environmental assessment.

The purpose of the second notice is to announce that RD/RUS has reached a Finding of No Significant Impact (see B.4). This notice can be published as soon as RD/RUS has prepared or approved the notice announcing that decision. Publication authorization and any specific requirements will be provided to the applicant. Normally there is no public comment period for Finding of No Significant Impact. However, where substantive comments are received on or substantive changes have been made to the environmental assessment, RD/RUS may require an additional period (15 days) for public review following the publication of its Finding of No Significant Impact determination.

This table explains the environmental assessment public notice requirements.

Environmental Assessment Public Notice Requirements							
Conversion of,	Environmental Assessment Notice			FONSI Notice			
Locating Facilities in, or Adverse Impact to the Listed Resource	Standard EA Notice	Include Preliminary Notice Information	Review Period ³ (days)	Standard FONSI Notice	Include Final Notice	Review Period 4,5 (days)	
None of the below	Yes	No	30	Yes	No	0 or 15	
Important Farmland ¹	Yes	Yes	30	Yes	Yes	0 or 15	
Wetlands ²	Yes	Yes	30	Yes	Yes	0 or 15	
Floodplains ²	Yes	Yes	30	Yes	Yes	0 or 15	
Cultural Resources ³	Yes	Yes	30	Yes	Yes	0 or 15	

- 1 Includes conversion of Important Farmland (as defined by DR 9500-3)
- 2 Refers to a proposal to locate a facility in a wetland or floodplain.
- 3 An adverse affect for Cultural Resources is defined in the context of the NHPA.
- 4 Comment periods are calculated from the date of the first publication.
- 5 An additional 15-day review is only necessary if substantive comments have been received and the EA has been significantly amended. This determination is made by the Rural Development State Environmental Coordinator.

5.3 Notifying the Public

It is RD/RUS's responsibility to ensure the adequacy of all public notices prior to making a decision regarding project approval. Therefore, prior to publishing public notices applicants should allow the Rural Development Processing Office to review and concur with all notices. When publishing public notices, the applicant should ensure that the notice has a reasonable likelihood of attracting the attention of individuals or organizations that may be interested in or affected by the project.

Normally newspaper advertisements are used to notify the public. However, other forms of notice may also be appropriate depending on the nature of the proposed project's potential impacts and the nature of the target audience. The following methods may be appropriate:

- Individual notices mailed to landowners or residents who live or own property adjacent to facilities or are directly affected by the construction of the facilities;
- Radio and television announcements:
- Inserts into utility bills;
- Notices posted in areas frequented by the target audience;
- Public meetings; or,
- Announcements at public activities (schools, place of worship, town meeting, etc.)

Newspaper notices should be of reasonable size and prominence and not be placed in the classified or legal section or an obscure portion of the newspaper. All public notices will be published in newspaper(s) of local circulation in the area affected by the proposed project. The publication frequency shall be 3 consecutive days for daily newspapers and 2 consecutive weeks in weekly newspapers. Public review dates shall be computed from the initial publication date of the notice. Proof of publication shall be provided to RD/RUS either as a copy of the advertisement or the publisher's affidavit.

Upon approval and acceptance of the Environmental Report, the Rural Development State Environmental Coordinator will determine if any unique public notice requirements (beyond the standard public notice language - see Exhibit B) for the proposed project are necessary. These may include:

- Content of the notice;
- Public review period;
- Frequency of newspaper advertisements;
- Other forms of public notice;
- Public meeting;
- Materials and information to be made available to the public; or,
- Other actions necessary to obtain sufficient public involvement in the environmental review process.

Copies of all comments received by the applicant, including unsolicited comments, must be submitted to RD/RUS as soon as possible. RD/RUS and the applicant will review the comments, address each comment, and make any appropriate changes to the environmental assessment.

5.4 Environmental Justice

If the project is to be located in a minority or low-income community and will have, or may be perceived to have, disproportionately high and adverse human health or environmental effects to that community, special efforts may be necessary to include these populations into the public involvement process. These efforts may include public notices, community meetings, and publishing public notices in languages other than English and in non-English newspapers or publications. All special outreach efforts must be fully described in the Environmental Report.

Nothing in the foregoing discussion is meant to restrict the applicant's use of other media in publishing public notices. RD/RUS's requirements for public notices are merely establishing a minimum. Other means of communication may be particularly effective in reaching the public in appropriate situations.

6.0 Exhibit A - Agency Correspondence for Information Gathering

Included in this exhibit are sample letters directed to a variety of Federal and State agencies that are normally contacted during the preparation of an Environmental Report. These examples are designed to provide guidance to applicants in preparing **information** requests to environmental regulatory agencies. Individual letters should be tailored to the nature of the specific project and the issues involved. At times a briefer format may be reasonable, while in other instances a more detailed explanation may be necessary.

The amount of project-related information that the applicant includes with the agency letter is optional. Normally it is sufficient to include a project description and a USGS map showing the proposed project's location of all construction-related activities.

The Rural Development State Environmental Coordinator or Processing Office can provide the appropriate names and addresses.

A.1 State Historic Preservation Officer Letter Concerning Cultural Resources

Normally there will be no initial letter to request information from the State Historic Preservation Officer.

A.2 U.S. Fish and Wildlife Service Letter Concerning Endangered Species

The (*Applicant's name*) is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of (*description of the project*)¹ in (*county*), (*State*). The project is being proposed to (*give a brief statement supporting project need*). Enclosed is an U.S. Geological Survey map(s) that depicts the proposed project's construction activities and a description of the work involved.

The proposed project does not represent a "major construction activity" as defined in 50 CFR 402.02. We request a list of any Federally-listed or proposed threatened or endangered species and designated or proposed critical habitat that may be present in the project area. In addition, please advise us of any present concerns you may have related to possible effects of the project listed above on such species or critical habitat, as well as any other wildlife concerns.

We would appreciate a response within 30 days. If you need any further information or wish to discuss our project, please contact (*name*) at (*telephone number*).

¹Applicants could provide a complete project description as an attachment to this letter. In order for the USFWS to provide appropriate project reviews, the project descriptions submitted need to be explicit in the types and locations of all construction activities that are being proposed.

A.3 Natural Resources Conservation Service (State or field office) Letter Concerning Important Farmland

The (*Applicant's name*) is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may assess the environmental impacts of (*description of the project*)¹ in (*county*), (*State*). The project is being proposed to (*give a brief statement supporting project need*). Enclosed is an U.S. Geological Survey map(s) that depicts the proposed project's construction activities and a description of the work involved.

We are requesting information on the possible effects of the proposed project on important farmland and prime rangeland and any recommendations you have to minimize or avoid these effects. We also seek your assessment of the compatibility of the proposed project with State and local government or any private programs and policies to protect important farmland.

We are enclosing a copy of the Farmland Conversion Impact Rating Form, AD-1006 and the Farmland Conversion Impact Rating for Corridor Type Projects, Form NRCS-CPA-106, as applicable, to assist with the evaluation.

We would appreciate a response within 30 days. If you need any further information or wish to discuss our project, please contact (*name*) at (*telephone number*).

A.4 Letter to Federal Land Manager

The (*Applicant's name*) is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may access the environmental impacts of (*description of the project*)¹ in (*county*), (*State*). The project is being proposed to (*give a brief statement supporting project need*). Enclosed is an U.S. Geological Survey map(s) that depicts the proposed project's construction activities and a description of the work involved.

As is shown on the enclosed map, some of the construction may take place in the (name of unit). Although the submittal of a special use permit application at this time would be premature, we are seeking information on environmental effects from the projects as an input to the Rural Utilities Service's decision-making process. We request your review of this project for potential impacts to officially designated areas within the (name of unit), and any recommendations you may have to mitigate or avoid these effects. We would also appreciate receiving any information regarding additional review requirements that your agency may have.

We would appreciate a response within 30 days. If you need any further information or wish to discuss the project, please contact (*name*) at (*telephone number*).

¹Applicants could provide a complete project description as an attachment to this letter. In order for NRCS to provide appropriate project reviews, the project descriptions submitted need to be explicit in the types and locations of construction activities that are being proposed.

¹Applicants could provide a complete project description as an attachment to this letter. In order for the agency to provide appropriate project reviews, the project descriptions submitted need to be explicit in the types and locations of all construction activities that are being proposed.

A.5 State Natural Resource or Environmental Agency Letter

The (*Applicant's name*) is in the process of performing an environmental review pursuant to the National Environmental Policy Act for the USDA, Rural Utilities Service in order that it may access the environmental impacts of (*description of the project*)¹ in (*county*), (*State*). The project is being proposed to (*give a brief statement supporting project need*). Enclosed is an U.S. Geological Survey map(s) that depicts the proposed project's construction activities and a description of the work involved.

(Applicant's name) requests that your office review the proposed project for any State and Federally-listed threatened and endangered species and any other important State natural resources that may occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts.

We would appreciate a response within 30 days. If you need any further information or wish to discuss the project, please contact (*name*) at (*telephone number*).

A.6 State Coastal Management Program Agency Letter Concerning Coastal Zone Management Issues

There are no coastal zones in Vermont.

¹Applicants could provide a complete project description as an attachment to this letter. In order for the agency to provide appropriate project reviews, the project descriptions submitted need to be explicit in the types and locations of all construction activities that are being proposed

7.0 Exhibit B - Sample Public Notices

B.1 Preliminary Notices for Categorical Exclusions

These notices are required for proposed projects classified as categorical exclusions that propose to convert important farmland, construct facilities in a wetland or floodplain, or adversely affect a cultural resource.

Preliminary Notice of Potential Conversion of [insert issue(s)]¹

The USDA, Rural Utilities Service has received an application for financial assistance from [insert applicant's name]. The proposed project consists of [itemize the project's construction activities and locations]. If implemented, the proposed project will convert [insert issue(s)¹ – include acreage, locations]. The purpose of this notice is to inform the public of this proposed conversion and request comments concerning the proposed project, alternative sites or actions that would avoid these impacts, and methods that could be used to minimize these impacts.

The environmental documentation regarding this proposed project is available for review at [insert Rural Development office location or other locations]. For questions regarding this proposal contact [insert name and telephone number of Rural Development official].

Any person interested in commenting on this proposal should submit comments to the address above by [have newspaper insert a date that is 30 days from the date the notice is first published].

A general location map of the proposal is shown below. [insert map].

B.2 Final Notices for Categorical Exclusions

Whenever a preliminary notice is published, the publication of a final notice is required. Below is a sample of a Final Notice.

Final Notice of Potential Conversion of [insert issue(s) ¹]

The USDA, Rural Utilities Service has received an application for financial assistance from [insert applicant's name]. The proposed project consists of [itemize the project's construction elements and locations]. Rural Development has assessed the environmental impacts of this proposed project and determined that the location of [insert construction activity or facility] will convert [insert issue(s)¹]. It has been determined that there is no practicable alternative to avoiding this conversion. The basis of this determination is [summarize the justification and reason for the conversion].

For information regarding this notice contact [insert Rural Development official's name and telephone number].

A general location map of the proposal is shown below. [Insert map].

¹ Important Farmland, Wetland, Floodplain, or an "Adverse Effect to a Cultural Resource"

¹ Important Farmland, Wetland, Floodplain, or an "Adverse Effect to a Cultural Resource"

B.3 Notice of Availability of Environmental Assessment

Upon review and acceptance of the applicant's Environmental Report, the Environmental Report will serve as RD/RUS's environmental assessment and shall be made available for public review and comment for a 30-day review period. If the proposed project proposes a conversion of important farmland, construct a facility in a wetland or floodplain, or adversely affect a cultural resource, the contents of the Preliminary Notice as specified in B.1 need to be integrated into the notice below.

Notice of the Availability of an Environmental Assessment

The USDA, Rural Utilities Service has received an application for financial assistance from [insert applicant's name]. As required by the National Environmental Policy Act, the Rural Utilities Service has prepared an Environmental Assessment that evaluated the potential environmental effects and consequences of the proposed project. This notice announces the availability of the Environmental Assessment for pubic review and comment.

The proposed project consists of [itemize the project's construction activities and locations; include information regarding any conversion(s) of [insert issue¹]; and summarize all proposed mitigation measures and locations used to minimize any adverse environmental effects]. The alternatives considered to the proposed project include: [insert a summary of the alternatives and locations (if applicable) considered and discussed in the Environmental Assessment].

Copies of the Environmental Assessment are available for review at [insert Rural Development office location; if the Environmental Assessment is available at any other location(s) give address and telephone number]. For further information contact [insert name and telephone number of Rural Development official]. Any person interested in commenting on this proposed project should submit comments to the address above by [have newspaper insert a date that is 30 days from the first publication date].

A general location map of the proposal is shown below [Insert general location map of the proposed project].

¹ Important Farmland, Wetland, Floodplain, or an "Adverse Effect to a Cultural Resource"

B.4 Finding of No Significant Impact Notice

Subsequent to the notice announcing the availability of an environmental assessment and RD/RUS approval, the applicant shall publish a public notice informing the public of RD/RUS's determination of a Finding of No Significant Impact for the proposed project. Where the proposed project proposes to convert important farmland, wetlands, or floodplains or adversely affects a cultural resource, the content of a Final Notice as specified in B.2 will be integrated in the Finding of No Significant Impact notice.

Notice of a Finding of No Significant Impact

The USDA, Rural Utilities Service has received an application for financial assistance from [insert applicant's name]. The proposed project consists of [itemize the project's construction activities and locations; include information regarding any conversion(s) of [insert issue¹].

As required by the National Environmental Policy Act, the Rural Utilities Service has assessed the potential environmental effects of the proposed project and has determined that the proposal will not have a significant effect on the human environment and for which an Environment Impact Statement will not be prepared. The basis of this determination is [briefly summarize reasons]. [Add if necessary] In order to avoid or minimize any adverse environmental impacts, the Rural Utilities Service will require the applicant to incorporate the following mitigation measures into the proposed project's design [briefly summarize all proposed mitigation measures and locations].

Copies of the Environmental Assessment can be reviewed or obtained at [insert the Rural Development office location and telephone number]. For further information, please contact [insert Rural Development official's name and telephone number].

[If additional public review period is required have newspaper insert a date 15 day after the date of the first publication]² A general location map of the proposal is shown below. [insert general location map of the proposed project].

Normally, there is no comment period for a Finding of No Significant Impact Notice. However, where the proposed project is controversial or RD/RUS has received substantive environmental comments that required a significant modification of the environmental assessment, the Finding of No Significant Impact notice may be published with an additional 15-day comment period. Applicants will be informed by the Rural Development State Environmental Coordinator or Processing Office whether this requirement is applicable. If this is the case, information regarding the additional comment period needs to be included in the public notice - see note 2 above.

¹ Important Farmland, Wetland, Floodplain, or an "Adverse Effect to a Cultural Resource"

² Any person interested in commenting on this FONSI may submit comments to the address above by [have newspaper insert date that is 15 days from the publication of this notice].

8.0 Exhibit C - Mitigation

The purpose of mitigation measures is to avoid or minimize adverse environmental impacts of a proposed project. When developed as part of an Environmental Report, properly applied mitigation measures will allow RD/RUS to determine that its financial support for a proposed project will not have a significant effect on the human environment and is therefore not required to prepare an Environmental Impact Statement.

Mitigation measures can be characterized as:

Structural. These measures are usually associated with planning, construction, and development activities. For example:

- Limit line sizes to serve only current population in a floodplain or to limit development in areas of important farmland;
- Provide a vegetative buffer zone along creeks, streams, etc.;
- Route construction away from sensitive areas historic properties, critical habitat, etc.; or,
- Use of existing previously disturbed Rights of Way.

Restrictive. These measures are usually associated with development and operation. For example:

- Limit construction to certain times of the year winter for wetland crossings, periods of low wildlife activity after breeding season or spawning run;
- Halt work if an archaeological resource is uncovered;
- Limit access to utility lines in protected or sensitive resource areas; or,
- Minimize vegetative clearing in a riparian zone.

Regulatory. These measures rely on a third party to monitor for compliance. For example:

- Require U. S. Army Corps of Engineers individual permit or notification of construction for nationwide permit in wetland areas;
- Evidence of approvals from land management agencies BLM, USFS, etc.; or,
- Memorandum of agreement with State Historic Preservation Officer.

Awareness. These measures rely on a third party to provide evidence of compliance. For example:

- Consultation with expert agencies when a resource may be impacted NRCS for important farmland or U. S. Fish & Wildlife Service for critical habitat for threatened and endangered species; or,
- Compatibility with local comprehensive land use plans.

Mitigation measures can be very effective when applied properly. In reviewing potential mitigation measures give consideration to the following:

- The adverse effect must have a reasonable chance of occurring in the foreseeable future. Mitigation measures are only useful when there is an compelling reason to avoid or minimize adverse effects that have a reasonable expectation of occurring. If an adverse effect has a low expectancy in the foreseeable future, mitigation may not be necessary;
- Mitigation measures must be practicable. There must be a reasonable expectation that the measure can be applied and when applied, will have the desired outcome;
- There must be some motivation behind the mitigation measure. In other words, there must be some assurance that the measure will be implemented. Rural Development often relies on third parties to monitor and enforce implementation. Regulatory agencies are generally in the best position to accomplish this. It should also be expected that when the reason for the mitigation no longer exists, the mitigation would be discontinued;
- A mitigation measure should be in balance with both the potentials for impact on the environmental resource and the resource's relative environmental value. High potential impacts on critical resources would require a strong mitigation measure (e.g. restrictive measure). An awareness type measure would be more appropriate where there is a low potential for impact on a less critical environmental resource:
- Mitigation measures must be tailored to the specific condition of a project and its owner's capabilities. Customs and traditions in an area can often determine if a mitigation measure can be carried out to achieve its desired results; and,
- Developing and applying successful mitigation measures is more of an art then a science. There is no "one best solution" to avoiding or minimizing adverse impacts for all proposed projects. The language of mitigation implies subjective determinations – reasonable, foreseeable, practicable, value, etc. The applicant and RD/RUS must evaluate and balance all of these elements.

C.1 Examples of Mitigation Measures

A list of typical mitigation and monitoring commitments that may be appropriate for certain types of applicant projects has been provided below. The list is by no means complete and is for illustrative purposes only.

Land Use

- Select ROW which supports present and planned land use; or
- Share an established corridor with other utilities.

Formally Classified Lands

 Avoid impacting properties that are owned and administered by Federal, State, and local agencies or have been accorded special protection through formal designation.

Floodplains

- Minimize the extent of floodplains to be crossed or impacted by the construction of facilities;
- Locate support structures and facilities to allow for adequate flow of flood waters in the event of flooding;
- Design support structures to minimize accumulation of flood borne debris; and,
- Minimize clearing of riparian vegetation.

Wetlands

- Avoid crossing wetlands where practicable, or minimize the extent of wetlands crossed:
- Consider the purchase of wetlands outside the project corridor to compensate for impacts to wetland resources;
- Avoid routing a permanent access road through wetlands;
- Perform certain construction activities in wetlands during dry conditions or when the ground is frozen; and,
- Minimize clearing of riparian vegetation.

Cultural Resources

- Plan to route the utility lines away from historical properties;
- Consider restoration, if avoidance is not practical;
- Use vegetative screens to minimize visual intrusion:
- In consultation with RD/RUS and State Historic Preservation Officer, alter proposed project if a "no effect" determination can not be readily achieved;
- Halt work if archaeological resources are uncovered and immediately contact State Historic Preservation Officer and RD/RUS. Do not resume work in the affected area until clearance has been received from State Historic Preservation Officer and RD/RUS; and,
- State that stipulations or agreements developed, as a result of the Section 106 process will be met.

Aesthetics

- Avoid scenic areas, if possible; and
- Commit to thorough cleanup and revegetation of the Right of Way after project completion.

Threatened and Endangered Species

- Avoid threatened and endangered species and critical habitat;
- Perform construction outside the breeding season or when the species have migrated out of the area; and,
- If critical habitat cannot be avoided, state that stipulations resulting from consultation with the U. S. Fish & Wildlife Service or National Marine Fisheries Service will be met.

Wildlife

- Avoid open expanses of water or wetlands used as flight paths by migrating waterfowl;
- Avoid waterfowl nesting or rearing areas; and,
- Perform construction activities during seasons of low wildlife activity (e.g., after breeding period or spawning run).

Vegetation

- Use an existing ROW to minimize new clearing;
- Use brush blades instead of dirt blades when clearing Right of Way;
- Coordinate new planting with the NRCS, USFS, BLM, appropriate State agencies, or individual landowners; and,
- Schedule construction in order to minimize earth disturbance during wet seasons.

Water Quality Issues

- Avoid placing utility lines within streambeds;
- Avoid use of herbicides near waterways;
- Avoid storing petroleum products, chemicals, toxic substances or hazardous materials within a floodplain;
- Avoid groundwater contamination through proper handling and storage of petroleum products, chemicals, toxic substances, and hazardous materials;
- Require sedimentation controls when working on water intake or discharge facilities in lakes and stream banks; and,
- Avoid crossing streambeds or waterways except at designated fords, crossing points, or bridges.

Soils

- Minimize soil erosion by mulching, seeding, and replanting or implementing
 erosion and sedimentation control (if available, include samples of best
 management practices into the construction contractors' obligations that are part
 of construction contractual specifications); and
- Describe efforts to restore or replace topsoil that may be disturbed.

Air Pollution

- During construction, dampen access roads to minimize fugitive dust; and
- Avoid burning of slash and debris or burn only within applicable regulations.

Transportation

Avoid placing structures near airfield runways, approaches and flight paths.

Noise

 Schedule work to avoid evening or weekend shifts that might annoy local residents.

Monitoring

- Schedule periodic inspections of project area (aerial or ground surveillance of facility for damage, fatigue, failure, vandalism, etc.); and,
- Immediately after project is completed and during regular monitoring, inspect for effectiveness of the mitigation program and ensure permit conditions have been met.

9.0 Exhibit D - Regulations, Statutes, and Executive Orders

LISTING	CITATION
Archaeological & Historical Preservation Act	16 U.S.C. 461
Clean Air Act	42 U.S.C. 7401
Clean Water Act	32 U.S.C. 1251
Section 401 Water Quality Certifications	
Section 404 Permits for Discharging Dredged or Fill Material into the Waters of the United States	33 CFR Part 330
Coastal Barrier Improvement Act	42 U.S.C. 4028
Coastal Barrier Resources Act	16 U.S.C. 3501
Coastal Zone Management Act	16 U.S.C. 1451
Comprehensive Environmental Response, Compensation, & Liability Act	42 U.S.C. 9601
Council on Environmental Quality Regulations	40 CFR parts 1500-1508
Endangered Species Act	16 U.S.C. 1531 et seq.
Farmland Protection Policy Act	7 U.S.C. 4201 et seq.
Marine Protection, Research, & Sanctuaries Act	33 U.S.C. 1401
National Environmental Policy Act	42 U.S.C. 4321-4346
National Historic Preservation Act	16 U.S.C. 470 et seq.
National Trails System Act	16 U.S.C. 1241
Native American Graves & Repatriation Act	25 U.S.C. 3001
Noise Control Act	42 U.S.C. 7901
Resource Conservation & Recovery Act	42 U.S.C. 3251
Safe Drinking Water Act	42 U.S.C. 300
Toxic Substances Control Act	15 U.S.C. 2601
Wild and Scenic Rivers Act	16 U.S.C 1271
Wilderness Act	16 U.S.C 1131
Executive Order 11514, Protection and Enhancement of Environmental Quality	3 CFR 1970 Comp., pg. 104
Executive Order 11593, Protection and Enhancement of the Cultural Environment	3 CFR 1971 Comp., pg. 154
Executive Order 11988, Floodplain Management	3 CFR 1977 Comp., pg. 117
Executive Order 11990, Protection of Wetlands	3 CFR 1977 Comp., pg. 121

Executive Order 12898, Environmental Justice	3 CFR 1994 Comp., pg. 859	
Departmental Regulation, Land Use Policy	DR 9500-3	
Departmental Regulation, Fish & Wildlife Policy	DR 9500-4	
Departmental Regulation, Policy on Range	DR 9500-5	
USDA's National Environmental Policy Act; Final Policies & Procedures	7 CFR Part 1b	
USDA, NRCS, Farmland Protection Policy	7 CFR Part 658	
USDA's Enhancement, Protection, and Mgmt of the Cultural Environment	7 CFR Part 3100	

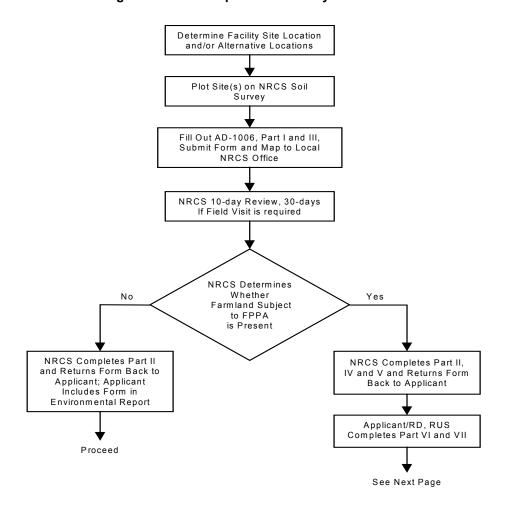
10.0 Exhibit E – Example of the Table of Contents for an Environmental Report Executive Summary (for Environmental Assessments)

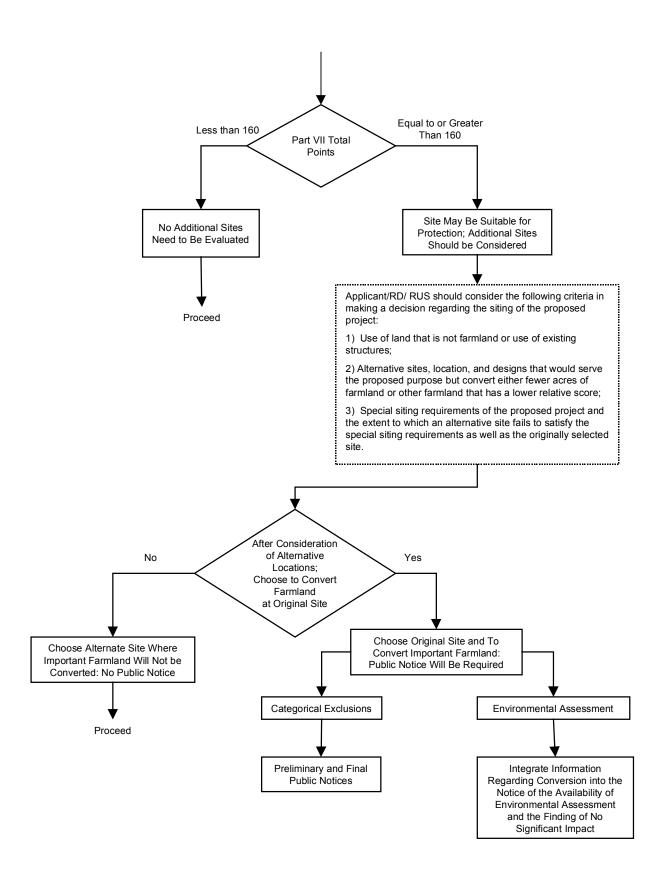
- 1.0 Purpose and Need of Project
 - 1.1 Project Description (Proposed Action or Proposed Project)
 - 1.2 Purpose and Need of Project
- 2.0 Alternatives to the Proposed Action
- 3.0 Affected Environment/Environmental Consequences
 - 3.1 Land Use/Important Farmland/Formally Classified Lands
 - 3.1.1 Affected Environment*
 - 3.1.2 Environmental Consequences*
 - 3.1.3 Mitigation*
 - 3.2 Floodplains
 - 3.3 Wetlands
 - 3.4 Cultural Resources
 - 3.5 Biological Resources
 - 3.6 Water Quality Issues
 - 3.7 Coastal Resources
 - 3.8 Socio-Economic/Environmental Justice Issues
 - 3.9 Miscellaneous Issues
 - 3.10 Intergovernmental Review
- * Sections repeated through all Section 3.0 subsections.
- 4.0 Summary of Mitigation
- 5.0 Correspondence
- 6.0 Exhibits/Maps

11.0 Exhibit F - Regulatory Compliance Flowcharts

F-1 Farmland Protection Policy Act Flowchart (7 CFR Part 658)

Farmland Conversion Impact Rating Form (Form AD-1006) Designed for Site Specific Facility Locations





F-2 National Historic Preservation Act - Section 106 Regulations Flowchart

Overview of the Section 106 (36 CFR Part 800) Review Process

This exhibit has been omitted because it is out of date. The National Office of the rural Utilities Service is revising this exhibit.

F-3 Environmental Justice

NARRATIVE FOR ENVIRONMENTAL JUSTICE AND NATIONAL ENVIRONMENTAL POLICY ACT FLOWCHART

The Environmental Justice and National Environmental Policy Act Flowchart has been prepared to identify where and how environmental justice issues can be addressed in the National Environmental Policy Act process, if applicable. The draft Council on Environmental Quality's "Guidance for Environmental Justice under NEPA" (April 4, 1997) contains additional suggestions and should also be consulted.

Note that the flowchart portrays a typical Environmental Impact Statement process. Some USDA agencies use this same process in the preparation of EAs and should therefore use this flowchart when conducting these documents.

1. Define the purpose and need and area of potential effect of the proposed project

The proposed project should be clearly defined so that interested parties understand what is being proposed. The National Environmental Policy Act document should clearly identify the purpose of the proposal and provide justification as to its need. The proposed project's area of potential effect should be defined (i.e., physical boundary of area reasonably expected to be affected by the action) so that the applicant and RD/RUS can include the minority and low-come populations within this area in all of its outreach efforts.

2. Initiate scoping.

Consideration of potential environmental justice concerns should begin with this step of the National Environmental Policy Act process. Any minority populations and lowincome populations located within the area of potential effects should be identified.

When identifying minority and low-income populations, the following definitions used in the Departmental Regulation on Environmental Justice should be used:

Environmental Justice means that, to the greatest extent practicable and permitted by law, all populations are provided the opportunity to comment before decisions are rendered on, are allowed to share in the benefits of, are not excluded from, and are not disproportionately or adversely affected by, government programs and activities relating to human health or the environment

Minority - A person who is a member of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; Black, not of Hispanic Origin; or Hispanic.

Minority population - Any readily identifiable group of minority persons who live in geographic proximity, and, if circumstances warrant, migrant farm workers and other geographically dispersed/transient persons who will be similarly affected by USDA programs or activities.

Low-income population - Any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, migrant farm workers and other geographically dispersed/transient persons who will be similarly affected by USDA programs or activities. Low-income populations may be may be identified using data collected, maintained, and analyzed by an agency or from analytical tools such as the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports, Series P-60 on Income and Poverty.

Once the potentially affected parties have been identified, it will be important to communicate with and understand the concerns of these groups. All interested and/or affected parties should be notified of the proposed project. Notification should be accomplished by such means as publishing notices in local newspapers, including those read by potentially impacted minority and low-income groups, and by sending notices out to elected officials, civic organizations, religious organizations, superintendents of schools, local PTAs and other community organizations that can help to facilitate outreach. Announcements should also be made through such vehicles as local radio and television stations and newspapers. Broadcasts and publications made in languages other than English can be particularly helpful in communicating with non-English speakers.

Applicant and RD/RUS should find creative and meaningful ways to facilitate access of information about the proposed project and the National Environmental Policy Act process to potentially affected minority and low-income populations. Outreach possibilities would include organizing public meetings at a time and place that is convenient for the potentially affected communities, scheduling meetings with elected officials and/or community organizations, and publishing a newsletter to keep people informed.

The participation of interested or affected parties should be encouraged during scoping as well as throughout the entire National Environmental Policy Act process. To facilitate participation by persons who do not speak or understand English documents, meetings, personal contacts, and written correspondence should be translated. Such translations pertain to each of the steps that follow.

3. Define range of alternatives to be evaluated.

In cases where a proposed project might have a disproportionately high and adverse impact on minority or low-income populations, applicants and RD/RUS should make a strong effort to encourage members of those communities to help develop and comment on possible alternatives. Efforts would include organizing meetings to facilitate public input on the alternatives.

4. Analyze effects of the proposed project and alternatives considered on the quality of the human environment.

Include an analysis of the extent to which minority and/or low-income populations might be disproportionately affected. The analysis should include potential impacts to

subsistence consumption and human health as well as the related economic and social effects of each alternative.

5. Develop mitigation to offset or minimize adverse effects.

The concerns and suggestions of potentially affected minority and/or low-income populations should be carefully considered in the development of mitigation measures. Once mitigation measures have been developed there should be follow-up to ensure they are implemented and are effective.

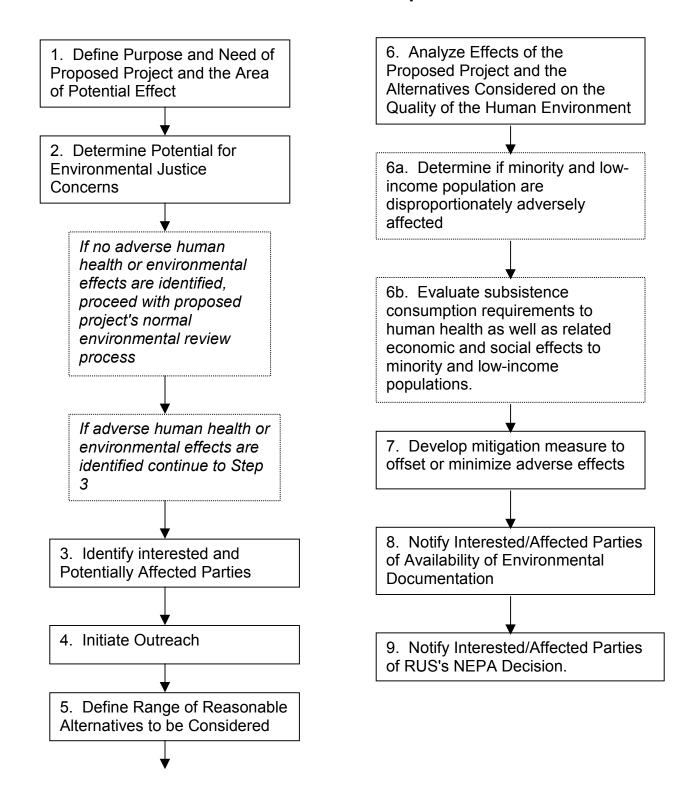
6. Where applicable, notify interested or affected parties of the availability of draft National Environmental Policy Act documents and encourage comment.

The draft provides an important opportunity to demonstrate how concerns raised during the scoping process have been considered in the development of alternatives and to encourage additional input.

7. Notify interested or affected parties of agency decision.

Demonstrate how concerns with the draft National Environmental Policy Act document have been addressed and to address any additional concerns raised before publishing a FONSI. Concerns identified at this time should be incorporated and addressed in the FONSI. Notification should include all parties contacted during the scoping process and those who provided comment on the draft National Environmental Policy Act document. Applicants and RD/RUS are encouraged to meet with any affected populations to discuss and answer questions about the proposed project.

Environmental Justice Implementation Flowchart for Environmental Reports



12.0 Exhibit G – Summary of Internet Addresses Found in the Text

Current Version of RUS Bulletin 1794A-602 (p. 9) and Addresses of Rural Development's State Environmental Co-ordinators (p. 10) http://www.usda.gov/rus/water/ees/index.htm)

Rural Development / Rural Utilities Services Environmental Compliance Library (p. 10) http://www.usda.gov/rus/water/ees/environ.htm

Statutes, Regulations, and Executive Orders listed in Exhibit D (p. 15) http://www.usda.gov/rus/water/ees/environ.htm

List of Town Clerks on Secretary of State's Web Site (p. 18) http://vermont-elections.org/el_pubs/Clerks.html

List of Regional Planning Commissions (p. 18) www.state.vt.us/dca/housing/rpc.htm

Aerial Photographs from the Vermont Mapping Program (p.18) www.state.vt.us/tax/map2.htm

Dealers of U. S. Geological Survey Topographical Maps in Vermont (p. 19) mapping.usgs.gov/esic/map_dealers/vt.html

Farmland Conversion Impact Rating Forms (p. 19) www.ftw.nrcs.usda.gov/npss/ad.htm (sites) www.ftw.nrcs.usda.gov/npss/cpa.htm (utility corridors)

Natural Resources Conservation Service's Offices in Vermont (pp. 20 and 30) www.vt.nrcs.usda.gov/vtloca.htm

Soil Survey Maps (p. 20) http://www.statlab.iastate.edu/soils/nsdaf/

Farmland Information from the American Farmland Trust (p. 20) http://www.farmland.org

Farmland Information from the Farmland Information Center (p. 20) http://farm.fic.niu.edu/fic/home.html

Nationwide Rivers Inventory in Vermont (p. 22) www.ncrc.nps.gov/rtca/nri/vt.htm

Silvio O. Conte National Fish and Wildlife Refuge (p. 23) www.fws.gov/r5soc

Maps of Vermont Wildlife Management Areas (p. 24) www.anr.state.vt.us/wmamaps/index.html

Vermont State Forests and State Parks (p. 25) www.state.vt.us/anr/fpr/lands/lands.htm

Corps of Engineers Recreation Areas in Vermont (p. 25) usace.army.mil/inet/functions/cw/cecwo/neweng.htm

Status of Flood Insurance and Community Identification Numbers (p. 27) http://www.fema.gov/fema/csb.htm

Flood Insurance Maps (p. 27) http://www.fema.gov/MSC/product.htm

Corps of Engineers Wetland Permits (p. 28) http://wetland.spk.usace.army.mil/

Maps of the National Wetlands Inventory (p. 29) http://www.nwi.fws.gov/

National Register of Historic Places (p. 32) http://www.cr.nps.gov/nr

Vermont Division for Historic Preservation (p. 33) www.uvm.edu/~vhnet/hpres/org/vdhp/hsi1.html

Historical Preservation, Section 106 Process (p. 33) http://www.achp.gov/index.html

Regional Offices of the Department of Environmental Conservation (p. 37) and Field Guide to the Agency of Natural Resources (p. 39) www.anr.state.vt.us/fguide/fguide.htm

National Pollutant Discharge Elimination System (p. 39) http://www.epa.gov/owm/npdes.htm

Non-Point Source Pollution (p. 39) http://www.epa.gov/OWOW/NPS/

Ground Water Protection Programs and Sole Source Aquifers (p. 39) http://www.epa.gov/OGWDW/ssanp.html Socio-economic Information (p. 40)

http://www.census.gov

http://www.census.gov/sdc/www/

Environmental Justice Information (p. 41)

http://www.epa.gov/swerosps/ej/

http://www.census.gov

State and Local Air Pollution Program Administrators (p. 43)

http://www.4cleanair.org/states.html

Operating Permits for Air Pollution Sources (p. 43)

http://www.epa.gov/oar/oagps/permits/

Federal Highway Administration (p. 44)

http://www.fhwa.dot.gov/

State Transportation Agencies (p. 44)

http://www.fhwa.dot.gov/related.html

Federal Aviation Administration (p. 44)

http://www.faa.gov/centers.htm

Radon (p. 44)

www.epa.gov/iag/radon/pubs/index.html

Hazardous Waste Sites in Vermont (p. 45)

www.anr.state.vt.us/dec/wastediv/rcra/hazsites.htm

Underground Storage Tanks in Vermont (p. 46)

www.anr.state.vt.us/dec/wastediv/ust/tankintr.htm